

Fig1A VHM PDE11/Actin

squads	id	group	sex	$\pm 11/\text{actin}$	n	no outs
6	GH11	GH	male	0.16515	0.16515	
7	GH13	GH	male	0.18335	0.18335	
3	GH5	GH	male	0.30972	0.30972	
11	GH6	GH	female	0.36549	0.36549	
19	GH19	GH	male	0.51938	0.51938	
10	GH4	GH	female	0.56732	0.56732	
4	GH7	GH	male	0.64856	0.64856	
17	GH17	GH	male	0.75934	0.75934	
2	GH3	GH	male	0.76222	0.76222	
15	GH14	GH	female	0.76632	0.76632	
16	GH16	GH	female	0.92487	0.92487	
12	GH8	GH	female	1.00585	1.00585	
18	GH18	GH	female	1.05468	1.05468	
14	GH12	GH	female	1.05947	1.05947	
20	GH20	GH	female	1.06635	1.06635	
9	GH2	GH	female	1.20031	1.20031	
1	GH1	GH	male	1.38436	1.38436	
8	GH15	GH	male	1.83378	1.83378	
5	GH9	GH	male	1.93373	1.93373	
13	GH10	GH	female	2.06597		
13	SH10	SH	female	0.15392	0.15392	
20	SH20	SH	female	0.28104	0.28104	
14	SH12	SH	female	0.33714	0.33714	
17	SH17	SH	male	0.34713	0.34713	
5	SH9	SH	male	0.36353	0.36353	
15	SH14	SH	female	0.37431	0.37431	
6	SH11	SH	male	0.38085	0.38085	
1	SH1	SH	male	0.38358	0.38358	
11	SH6	SH	female	0.38495	0.38495	
2	SH3	SH	male	0.42611	0.42611	
7	SH13	SH	male	0.43128	0.43128	
3	SH5	SH	male	0.45201	0.45201	
10	SH4	SH	female	0.49926	0.49926	
18	SH18	SH	female	0.55483	0.55483	
9	SH2	SH	female	0.56613	0.56613	
16	SH16	SH	female	0.6311	0.6311	
19	SH19	SH	male	0.91023	0.91023	
12	SH8	SH	female	1.0494		
4	SH7	SH	male	1.23693		
12	SD8	SD	female	0.23788	0.23788	
14	SD12	SD	female	0.24346	0.24346	
10	SD4	SD	female	0.25681	0.25681	
11	SD6	SD	female	0.28211	0.28211	
13	SD10	SD	female	0.36907	0.36907	
2	SD3	SD	male	0.46589	0.46589	
20	SD20	SD	female	0.48351	0.48351	
18	SD18	SD	female	0.5133	0.5133	
9	SD2	SD	female	0.58459	0.58459	
16	SD16	SD	female	0.61517	0.61517	
6	SD11	SD	male	0.62356	0.62356	
7	SD13	SD	male	0.67815	0.67815	
4	SD7	SD	male	0.71086	0.71086	
1	SD1	SD	male	0.737	0.737	
8	SD15	SD	male	0.74047	0.74047	
17	SD17	SD	male	0.76551	0.76551	
15	SD14	SD	female	0.85379	0.85379	
19	SD19	SD	male	1.04657	1.04657	
5	SD9	SD	male	1.19375	1.19375	
3	SD5	SD	male	1.36771		
3	SW5	SW	male	0.14858	0.14858	
7	SW13	SW	male	0.18402	0.18402	
10	SW4	SW	female	0.33028	0.33028	
6	SW11	SW	male	0.35673	0.35673	
18	SW18	SW	female	0.38853	0.38853	
15	SW14	SW	female	0.42092	0.42092	
1	SW1	SW	male	0.42133	0.42133	
2	SW3	SW	male	0.46307	0.46307	
5	SW9	SW	male	0.46957	0.46957	
12	SW8	SW	female	0.51224	0.51224	
14	SW12	SW	female	0.5142	0.5142	
20	SW20	SW	female	0.59987	0.59987	
19	SW19	SW	male	0.61142	0.61142	
4	SW7	SW	male	0.76057	0.76057	
16	SW16	SW	female	0.77695	0.77695	
17	SW17	SW	male	0.81522	0.81522	
13	SW10	SW	female	0.83695	0.83695	
8	SW15	SW	male	0.8916	0.8916	
9	SW2	SW	female	1.00626	1.00626	
11	SW6	SW	female	1.59587		
3	SM5	SM	male	0.12238	0.12238	
7	SM13	SM	male	0.1336	0.1336	
6	SM11	SM	male	0.15255	0.15255	
10	SM4	SM	female	0.23564	0.23564	
17	SM17	SM	male	0.34392	0.34392	
14	SM12	SM	female	0.35059	0.35059	
2	SM3	SM	male	0.48146	0.48146	
12	SM8	SM	female	0.52729	0.52729	
19	SM19	SM	male	0.57724	0.57724	
15	SM14	SM	female	0.66385	0.66385	
16	SM16	SM	female	0.66866	0.66866	
11	SM6	SM	female	0.73487	0.73487	
13	SM10	SM	female	0.76518	0.76518	
18	SM18	SM	female	0.76793	0.76793	
4	SM7	SM	male	0.93862	0.93862	
8	SM15	SM	male	0.95011	0.95011	
20	SM20	SM	female	0.98591	0.98591	
5	SM9	SM	male	1.05653	1.05653	
1	SM1	SM	male	1.17093	1.17093	
9	SM2	SM	female	1.44936		

Fig1B VH C PDE11/Actin

squads	id	group	sex	PDE11/actin	n	no outs
8	SW15	SW	male	0.07385	0.07385	
4	SW7	SW	male	0.28049	0.28049	
20	SW20	SW	female	0.29222	0.29222	
2	SW3	SW	male	0.35927	0.35927	
19	SW19	SW	male	0.37067	0.37067	
11	SW6	SW	female	0.37563	0.37563	
12	SW8	SW	female	0.41037	0.41037	
9	SW2	SW	female	0.42009	0.42009	
16	SW16	SW	female	0.43801	0.43801	
5	SW9	SW	male	0.43955	0.43955	
13	SW10	SW	female	0.44406	0.44406	
14	SW12	SW	female	0.44626	0.44626	
15	SW14	SW	female	0.54656	0.54656	
6	SW11	SW	male	0.55917	0.55917	
10	SW4	SW	female	0.60541	0.60541	
17	SW17	SW	male	0.78426	0.78426	
7	SW13	SW	male	0.79344	0.79344	
18	SW18	SW	female	0.82843	0.82843	
3	SW5	SW	male	1.02686		
1	SW1	SW	male	1.04655		
8	SM15	SM	male	0.17424	0.17424	
2	SM3	SM	male	0.19464	0.19464	
4	SM7	SM	male	0.35587	0.35587	
20	SM20	SM	female	0.37372	0.37372	
15	SM14	SM	female	0.37856	0.37856	
6	SM11	SM	male	0.3814	0.3814	
12	SM8	SM	female	0.41143	0.41143	
19	SM19	SM	male	0.47761	0.47761	
11	SM6	SM	female	0.47901	0.47901	
9	SM2	SM	female	0.48347	0.48347	
16	SM16	SM	female	0.52341	0.52341	
5	SM9	SM	male	0.53111	0.53111	
1	SM1	SM	male	0.53128	0.53128	
10	SM4	SM	female	0.57254	0.57254	
17	SM17	SM	male	0.57676	0.57676	
13	SM10	SM	female	0.58019	0.58019	
14	SM12	SM	female	0.59199	0.59199	
18	SM18	SM	female	0.61632	0.61632	
3	SM5	SM	male	0.74948	0.74948	
7	SM13	SM	male	0.91896		

Fig 1C VHN PDE11/Actin

squads	id	group	sex	β 11/actin n no outs
7	GH13	GH	male	0.44274 0.44274
17	GH17	GH	male	0.48829 0.48829
10	GH4	GH	female	0.55991 0.55991
1	GH1	GH	male	0.60291 0.60291
11	GH6	GH	female	0.63227 0.63227
13	GH10	GH	female	0.65434 0.65434
12	GH8	GH	female	0.65738 0.65738
5	GH9	GH	male	0.70859 0.70859
16	GH16	GH	female	0.72215 0.72215
3	GH5	GH	male	0.74074 0.74074
4	GH7	GH	male	0.76725 0.76725
20	GH20	GH	female	0.81996 0.81996
9	GH2	GH	female	0.83862 0.83862
8	GH15	GH	male	0.89137 0.89137
18	GH18	GH	female	0.89205 0.89205
15	GH14	GH	female	0.95034 0.95034
2	GH3	GH	male	0.999 0.999
14	GH12	GH	female	1.07924 1.07924
19	GH19	GH	male	1.16955 1.16955
6	GH11	GH	male	1.23376
19	SH19	SH	male	0.44134 0.44134
20	SH20	SH	female	0.45937 0.45937
1	SH1	SH	male	0.51669 0.51669
15	SH14	SH	female	0.62917 0.62917
5	SH9	SH	male	0.63223 0.63223
9	SH2	SH	female	0.6675 0.6675
14	SH12	SH	female	0.68406 0.68406
10	SH4	SH	female	0.68742 0.68742
17	SH17	SH	male	0.74824 0.74824
11	SH6	SH	female	0.7574 0.7574
16	SH16	SH	female	0.76452 0.76452
13	SH10	SH	female	0.77036 0.77036
12	SH8	SH	female	0.80926 0.80926
7	SH13	SH	male	0.84134 0.84134
6	SH11	SH	male	0.85245 0.85245
4	SH7	SH	male	0.86083 0.86083
2	SH3	SH	male	0.88859 0.88859
18	SH18	SH	female	0.93678 0.93678
3	SH5	SH	male	1.07476
10	SD4	SD	female	0.33277 0.33277
14	SD12	SD	female	0.43488 0.43488
4	SD7	SD	male	0.47262 0.47262
20	SD20	SD	female	0.47796 0.47796
11	SD6	SD	female	0.5212 0.5212
5	SD9	SD	male	0.55086 0.55086
1	SD1	SD	male	0.58995 0.58995
19	SD19	SD	male	0.59748 0.59748
3	SD5	SD	male	0.61669 0.61669
6	SD11	SD	male	0.6822 0.6822
15	SD14	SD	female	0.73673 0.73673
16	SD16	SD	female	0.75905 0.75905
7	SD13	SD	male	0.76008 0.76008
2	SD3	SD	male	0.76372 0.76372
13	SD10	SD	female	0.79259 0.79259
17	SD17	SD	male	0.82595 0.82595
8	SD15	SD	male	0.93426 0.93426
18	SD18	SD	female	0.98395 0.98395
12	SD8	SD	female	1.02501 1.02501
9	SD2	SD	female	1.12161
2	SW3	SW	male	0.43757 0.43757
4	SW7	SW	male	0.44849 0.44849
5	SW9	SW	male	0.49849 0.49849
9	SW2	SW	female	0.52393 0.52393
10	SW4	SW	female	0.53763 0.53763
16	SW16	SW	female	0.55844 0.55844
19	SW19	SW	male	0.59334 0.59334
6	SW11	SW	male	0.60273 0.60273
3	SW5	SW	male	0.62397 0.62397
8	SW15	SW	male	0.63795 0.63795
14	SW12	SW	female	0.65118 0.65118
18	SW18	SW	female	0.67218 0.67218
20	SW20	SW	female	0.67519 0.67519
11	SW6	SW	female	0.67917 0.67917
15	SW14	SW	female	0.72269 0.72269
7	SW13	SW	male	0.76694 0.76694
13	SW10	SW	female	0.77856 0.77856
17	SW17	SW	male	0.96955 0.96955
12	SW8	SW	female	1.00772 1.00772
1	SW1	SW	male	1.3163
11	SM6	SM	female	0.43039 0.43039
18	SM18	SM	female	0.51322 0.51322
13	SM10	SM	female	0.54243 0.54243
1	SM1	SM	male	0.55674 0.55674
2	SM3	SM	male	0.5726 0.5726
3	SM5	SM	male	0.57459 0.57459
8	SM15	SM	male	0.60732 0.60732
7	SM13	SM	male	0.63767 0.63767
15	SM14	SM	female	0.65852 0.65852
5	SM9	SM	male	0.67811 0.67811
17	SM17	SM	male	0.68678 0.68678
19	SM19	SM	male	0.72354 0.72354
12	SM8	SM	female	0.72425 0.72425
16	SM16	SM	female	0.74245 0.74245
6	SM11	SM	male	0.80465 0.80465
20	SM20	SM	female	0.8134 0.8134
14	SM12	SM	female	0.85642 0.85642
10	SM4	SM	female	0.94823 0.94823
9	SM2	SM	female	1.02643 1.02643
4	SM7	SM	male	1.06411

Fig1D DHM PDE11/Actin

squads id	group	sex	β 11/actin n no outs	VAR7	squad ids	groups	sexes	β 11/actins n no outs
14 GH12	GH	female	0.1101	0.1101	14 GH12	GH	female	0.1101 0.1101
2 GH3	GH	male	0.33053	0.33053	2 GH3	GH	male	0.33053 0.33053
10 GH4	GH	female	0.4516	0.4516	10 GH4	GH	female	0.4516 0.4516
5 GH9	GH	male	0.53123	0.53123	5 GH9	GH	male	0.53123 0.53123
9 GH2	GH	female	0.57303	0.57303	9 GH2	GH	female	0.57303 0.57303
20 GH20	GH	female	0.62017	0.62017	20 GH20	GH	female	0.62017 0.62017
12 GH8	GH	female	0.64363	0.64363	12 GH8	GH	female	0.64363 0.64363
18 GH18	GH	female	0.66485	0.66485	18 GH18	GH	female	0.66485 0.66485
11 GH6	GH	female	0.6933	0.6933	11 GH6	GH	female	0.6933 0.6933
8 GH15	GH	male	0.70271	0.70271	8 GH15	GH	male	0.70271 0.70271
16 GH16	GH	female	0.73265	0.73265	16 GH16	GH	female	0.73265 0.73265
15 GH14	GH	female	0.75334	0.75334	15 GH14	GH	female	0.75334 0.75334
7 GH13	GH	male	0.85916	0.85916	7 GH13	GH	male	0.85916 0.85916
13 GH10	GH	female	0.87453	0.87453	13 GH10	GH	female	0.87453 0.87453
17 GH17	GH	male	0.93066	0.93066	17 GH17	GH	male	0.93066 0.93066
1 GH1	GH	male	1.01825	1.01825	1 GH1	GH	male	1.01825 1.01825
4 GH7	GH	male	1.08352	1.08352	4 GH7	GH	male	1.08352 1.08352
6 GH11	GH	male	1.30979	1.30979	6 GH11	GH	male	1.30979 1.30979
3 GH5	GH	male	1.3878	1.3878	3 GH5	GH	male	1.3878 1.3878
19 GH19	GH	male	1.72579		19 GH19	GH	male	1.72579
4 SH7	SH	male	0.07392	0.07392	6 SW11	SW	male	0.06066 0.06066
14 SH12	SH	female	0.11478	0.11478	14 SW12	SW	female	0.09594 0.09594
6 SH11	SH	male	0.15539	0.15539	8 SW15	SW	male	0.27384 0.27384
2 SH3	SH	male	0.3036	0.3036	19 SW19	SW	male	0.35109 0.35109
3 SH5	SH	male	0.32032	0.32032	7 SW13	SW	male	0.39321 0.39321
5 SH9	SH	male	0.42738	0.42738	17 SW17	SW	male	0.39757 0.39757
19 SH19	SH	male	0.46363	0.46363	11 SW6	SW	female	0.49921 0.49921
18 SH18	SH	female	0.46937	0.46937	9 SW2	SW	female	0.50659 0.50659
20 SH20	SH	female	0.53325	0.53325	18 SW18	SW	female	0.55132 0.55132
12 SH8	SH	female	0.61126	0.61126	12 SW8	SW	female	0.55512 0.55512
10 SH4	SH	female	0.66627	0.66627	10 SW4	SW	female	0.5862 0.5862
7 SH13	SH	male	0.66862	0.66862	16 SW16	SW	female	0.59124 0.59124
15 SH14	SH	female	0.72915	0.72915	2 SW3	SW	male	0.69345 0.69345
13 SH10	SH	female	0.75716	0.75716	3 SW5	SW	male	0.6939 0.6939
1 SH1	SH	male	0.75817	0.75817	15 SW14	SW	female	1.02725 1.02725
16 SH16	SH	female	0.77057	0.77057	20 SW20	SW	female	1.0331 1.0331
17 SH17	SH	male	0.80015	0.80015	1 SW1	SW	male	1.22588 1.22588
11 SH6	SH	female	1.00313	1.00313	4 SW7	SW	male	1.64605 1.64605
9 SH2	SH	female	1.74364		5 SW9	SW	male	1.84532 1.84532
14 SD12	SD	female	0.09128	0.09128	13 SW10	SW	female	2.87632
6 SD11	SD	male	0.10031	0.10031				
4 SD7	SD	male	0.10138	0.10138				
19 SD19	SD	male	0.21902	0.21902				
2 SD3	SD	male	0.28955	0.28955				
13 SD10	SD	female	0.37024	0.37024				
7 SD13	SD	male	0.39775	0.39775				
16 SD16	SD	female	0.4744	0.4744				
20 SD20	SD	female	0.48035	0.48035				
15 SD14	SD	female	0.4946	0.4946				
12 SD8	SD	female	0.51359	0.51359				
11 SD6	SD	female	0.52842	0.52842				
10 SD4	SD	female	0.60513	0.60513				
1 SD1	SD	male	0.6532	0.6532				
8 SD15	SD	male	0.72104	0.72104				
9 SD2	SD	female	0.75573	0.75573				
17 SD17	SD	male	0.81525	0.81525				
18 SD18	SD	female	0.86472	0.86472				
5 SD9	SD	male	0.92211	0.92211				
3 SD5	SD	male	1.03227	1.03227				
14 SM12	SM	female	0.11028	0.11028				
6 SM11	SM	male	0.19363	0.19363				
3 SM5	SM	male	0.21671	0.21671				
2 SM3	SM	male	0.25794	0.25794				
12 SM8	SM	female	0.4186	0.4186				
19 SM19	SM	male	0.51621	0.51621				
18 SM18	SM	female	0.55404	0.55404				
9 SM2	SM	female	0.55616	0.55616				
4 SM7	SM	male	0.57634	0.57634				
10 SM4	SM	female	0.68787	0.68787				
16 SM16	SM	female	0.77926	0.77926				
15 SM14	SM	female	0.77974	0.77974				
17 SM17	SM	male	0.91283	0.91283				
8 SM15	SM	male	1.15062	1.15062				
7 SM13	SM	male	1.25204	1.25204				
20 SM20	SM	female	1.36103	1.36103				
5 SM9	SM	male	1.58639	1.58639				
1 SM1	SM	male	1.60164	1.60164				
11 SM6	SM	female	1.66595	1.66595				
13 SM10	SM	female	1.73158	1.73158				
8 Shnonexist	SH	male						

Fig1G DHC PDE11/Actin

squads	id	group	sex	β 11/actin n no outs
9	GH2	GH	female	0.20007 0.20007
18	GH18	GH	female	0.24256 0.24256
16	GH16	GH	female	0.26289 0.26289
15	GH14	GH	female	0.27684 0.27684
6	GH11	GH	male	0.28244 0.28244
20	GH20	GH	female	0.28835 0.28835
12	GH8	GH	female	0.31566 0.31566
10	GH4	GH	female	0.41263 0.41263
4	GH7	GH	male	0.42642 0.42642
17	GH17	GH	male	0.43099 0.43099
1	GH1	GH	male	0.43671 0.43671
5	GH9	GH	male	0.44248 0.44248
14	GH12	GH	female	0.45363 0.45363
2	GH3	GH	male	0.45417 0.45417
8	GH15	GH	male	0.45552 0.45552
19	GH19	GH	male	0.47059 0.47059
3	GH5	GH	male	0.49178 0.49178
7	GH13	GH	male	0.50309 0.50309
11	GH6	GH	female	0.55407 0.55407
13	GH10	GH	female	0.67068
12	SH8	SH	female	0.19072 0.19072
17	SH17	SH	male	0.2535 0.2535
11	SH6	SH	female	0.2931 0.2931
1	SH1	SH	male	0.32147 0.32147
6	SH11	SH	male	0.32243 0.32243
4	SH7	SH	male	0.35282 0.35282
3	SH5	SH	male	0.35315 0.35315
14	SH12	SH	female	0.38115 0.38115
20	SH20	SH	female	0.40063 0.40063
9	SH2	SH	female	0.40103 0.40103
15	SH14	SH	female	0.41149 0.41149
2	SH3	SH	male	0.43415 0.43415
18	SH18	SH	female	0.51612 0.51612
13	SH10	SH	female	0.53032 0.53032
7	SH13	SH	male	0.57186 0.57186
10	SH4	SH	female	0.57746 0.57746
5	SH9	SH	male	0.61309 0.61309
16	SH16	SH	female	0.95455
19	SH19	SH	male	0.9731
17	SD17	SD	male	0.24262 0.24262
15	SD14	SD	female	0.26343 0.26343
14	SD12	SD	female	0.31502 0.31502
8	SD15	SD	male	0.33195 0.33195
9	SD2	SD	female	0.36404 0.36404
20	SD20	SD	female	0.36751 0.36751
1	SD1	SD	male	0.37883 0.37883
13	SD10	SD	female	0.41947 0.41947
11	SD6	SD	female	0.43427 0.43427
4	SD7	SD	male	0.46263 0.46263
10	SD4	SD	female	0.46805 0.46805
19	SD19	SD	male	0.4886 0.4886
7	SD13	SD	male	0.48909 0.48909
3	SD5	SD	male	0.51036 0.51036
6	SD11	SD	male	0.52591 0.52591
2	SD3	SD	male	0.57133 0.57133
18	SD18	SD	female	0.61458 0.61458
12	SD8	SD	female	0.66303 0.66303
5	SD9	SD	male	0.71148 0.71148
16	SD16	SD	female	0.90618
4	SW7	SW	male	0.17939
14	SW12	SW	female	0.20751 0.20751
20	SW20	SW	female	0.28544 0.28544
15	SW14	SW	female	0.29965 0.29965
6	SW11	SW	male	0.30534 0.30534
19	SW19	SW	male	0.37118 0.37118
8	SW15	SW	male	0.39357 0.39357
7	SW13	SW	male	0.43109 0.43109
1	SW1	SW	male	0.45236 0.45236
5	SW9	SW	male	0.48336 0.48336
12	SW8	SW	female	0.50102 0.50102
16	SW16	SW	female	0.50795 0.50795
2	SW3	SW	male	0.51408 0.51408
17	SW17	SW	male	0.52098 0.52098
13	SW10	SW	female	0.53032 0.53032
10	SW4	SW	female	0.53931 0.53931
9	SW2	SW	female	0.55677 0.55677
11	SW6	SW	female	0.58437 0.58437
3	SW5	SW	male	0.63093 0.63093
18	SW18	SW	female	0.66268 0.66268
17	SM17	SM	male	0.26187 0.26187
15	SM14	SM	female	0.26672 0.26672
16	SM16	SM	female	0.28484 0.28484
14	SM12	SM	female	0.29808 0.29808
4	SM7	SM	male	0.30823 0.30823
20	SM20	SM	female	0.33521 0.33521
6	SM11	SM	male	0.34099 0.34099
2	SM3	SM	male	0.38607 0.38607
12	SM8	SM	female	0.39495 0.39495
7	SM13	SM	male	0.39948 0.39948
5	SM9	SM	male	0.40704 0.40704
8	SM15	SM	male	0.41546 0.41546
19	SM19	SM	male	0.42111 0.42111
10	SM4	SM	female	0.45535 0.45535
9	SM2	SM	female	0.45984 0.45984
1	SM1	SM	male	0.48539 0.48539
11	SM6	SM	female	0.50337 0.50337
13	SM10	SM	female	0.62838 0.62838
3	SM5	SM	male	0.71883
18	SM18	SM	female	0.72146

Fig1F DHN PDE11/Actin

squads	id	group	sex	β 11/actin	α 11/actin
7	GH13	GH	male	0.451	0.451
8	GH15	GH	male	0.6033	0.6033
3	GH5	GH	male	0.6799	0.6799
17	GH17	GH	male	0.9193	0.9193
19	GH19	GH	male	1.0038	1.0038
5	GH9	GH	male	1.0894	1.0894
1	GH1	GH	male	1.108	1.108
4	GH7	GH	male	1.1663	1.1663
2	GH3	GH	male	1.1832	1.1832
6	GH11	GH	male	1.4989	
17	SH17	SH	male	0.5407	0.5407
3	SH5	SH	male	0.637	0.637
2	SH3	SH	male	1.0485	1.0485
7	SH13	SH	male	1.1147	1.1147
5	SH9	SH	male	1.182	1.182
6	SH11	SH	male	1.2616	1.2616
4	SH7	SH	male	1.8201	1.8201
1	SH1	SH	male	1.8361	1.8361
19	SH19	SH	male	2.0757	
17	SD17	SD	male	0.5175	0.5175
6	SD11	SD	male	0.5283	0.5283
5	SD9	SD	male	0.5975	0.5975
3	SD5	SD	male	0.7256	0.7256
2	SD3	SD	male	0.7447	0.7447
1	SD1	SD	male	0.9307	0.9307
4	SD7	SD	male	1.0356	1.0356
19	SD19	SD	male	1.0422	1.0422
7	SD13	SD	male	1.2266	1.2266
8	SD15	SD	male	1.4104	1.4104
6	SW11	SW	male	0.2532	0.2532
3	SW5	SW	male	0.5504	0.5504
2	SW3	SW	male	0.5592	0.5592
1	SW1	SW	male	0.708	0.708
5	SW9	SW	male	0.7608	0.7608
19	SW19	SW	male	0.7917	0.7917
8	SW15	SW	male	0.8391	0.8391
7	SW13	SW	male	0.896	0.896
4	SW7	SW	male	0.9687	0.9687
17	SW17	SW	male	1.1113	1.1113
8	SM15	SM	male	0.5329	0.5329
17	SM17	SM	male	0.5586	0.5586
3	SM5	SM	male	0.5621	0.5621
6	SM11	SM	male	0.6188	0.6188
2	SM3	SM	male	0.6229	0.6229
1	SM1	SM	male	0.718	0.718
19	SM19	SM	male	0.8983	0.8983
4	SM7	SM	male	1.3134	1.3134
7	SM13	SM	male	1.4393	1.4393
5	SM9	SM	male	1.6688	1.6688

Fig1H VHM PDE2/Actin

squads	id	group	sex	PDE2/actin	n	no outs
6	GH11	GH	male	0.43721	0.43721	
12	GH8	GH	female	0.57738	0.57738	
10	GH4	GH	female	0.6243	0.6243	
2	GH3	GH	male	0.76599	0.76599	
3	GH5	GH	male	0.85815	0.85815	
16	GH16	GH	female	0.87648	0.87648	
4	GH7	GH	male	0.92136	0.92136	
19	GH19	GH	male	1.06823	1.06823	
20	GH20	GH	female	1.11566	1.11566	
7	GH13	GH	male	1.17735	1.17735	
17	GH17	GH	male	1.22386	1.22386	
13	GH10	GH	female	1.22514	1.22514	
15	GH14	GH	female	1.26345	1.26345	
18	GH18	GH	female	1.38085	1.38085	
9	GH2	GH	female	1.40097	1.40097	
8	GH15	GH	male	1.55495	1.55495	
1	GH1	GH	male	1.6294	1.6294	
11	GH6	GH	female	1.88055	1.88055	
14	GH12	GH	female	2.22519		
5	GH9	GH	male	2.47033		
18	SH18	SH	female	0.60105	0.60105	
1	SH1	SH	male	0.65558	0.65558	
12	SH8	SH	female	0.70569	0.70569	
2	SH3	SH	male	0.73424	0.73424	
14	SH12	SH	female	0.74191	0.74191	
10	SH4	SH	female	0.75479	0.75479	
19	SH19	SH	male	0.79228	0.79228	
6	SH11	SH	male	0.84288	0.84288	
13	SH10	SH	female	0.84654	0.84654	
9	SH2	SH	female	0.8587	0.8587	
15	SH14	SH	female	0.94895	0.94895	
16	SH16	SH	female	0.94898	0.94898	
20	SH20	SH	female	1.04716	1.04716	
3	SH5	SH	male	1.08954	1.08954	
4	SH7	SH	male	1.09025	1.09025	
7	SH13	SH	male	1.18376	1.18376	
5	SH9	SH	male	1.20911	1.20911	
17	SH17	SH	male	1.33604	1.33604	
11	SH6	SH	female	2.43777		
2	SD3	SD	male	0.47882	0.47882	
4	SD7	SD	male	0.54339	0.54339	
12	SD8	SD	female	0.62384	0.62384	
11	SD6	SD	female	0.62762	0.62762	
10	SD4	SD	female	0.65976	0.65976	
14	SD12	SD	female	0.67621	0.67621	
19	SD19	SD	male	0.80908	0.80908	
20	SD20	SD	female	0.81718	0.81718	
6	SD11	SD	male	0.87301	0.87301	
13	SD10	SD	female	0.92036	0.92036	
18	SD18	SD	female	1.03052	1.03052	
16	SD16	SD	female	1.06262	1.06262	
15	SD14	SD	female	1.08747	1.08747	
8	SD15	SD	male	1.15123	1.15123	
7	SD13	SD	male	1.21509	1.21509	
5	SD9	SD	male	1.35314	1.35314	
17	SD17	SD	male	1.44316	1.44316	
9	SD2	SD	female	1.57755	1.57755	
1	SD1	SD	male	1.837	1.837	
3	SD5	SD	male	2.36347		
3	SW5	SW	male	0.49044	0.49044	
2	SW3	SW	male	0.56936	0.56936	
10	SW4	SW	female	0.65653	0.65653	
5	SW9	SW	male	0.75159	0.75159	
11	SW6	SW	female	0.78086	0.78086	
6	SW11	SW	male	0.79545	0.79545	
8	SW15	SW	male	0.84138	0.84138	
19	SW19	SW	male	0.96828	0.96828	
16	SW16	SW	female	1.00714	1.00714	
14	SW12	SW	female	1.02677	1.02677	
7	SW13	SW	male	1.07823	1.07823	
15	SW14	SW	female	1.09064	1.09064	
13	SW10	SW	female	1.09188	1.09188	
1	SW1	SW	male	1.11185	1.11185	
18	SW18	SW	female	1.13706	1.13706	
12	SW8	SW	female	1.33085	1.33085	
17	SW17	SW	male	1.33782	1.33782	
4	SW7	SW	male	1.38075	1.38075	
20	SW20	SW	female	1.51935	1.51935	
9	SW2	SW	female	1.59668	1.59668	
8	SM15	SM	male	0.44723	0.44723	
10	SM4	SM	female	0.45441	0.45441	
2	SM3	SM	male	0.52372	0.52372	
12	SM8	SM	female	0.60245	0.60245	
6	SM11	SM	male	0.62304	0.62304	
3	SM5	SM	male	0.63577	0.63577	
19	SM19	SM	male	0.6361	0.6361	
16	SM16	SM	female	0.7808	0.7808	
14	SM12	SM	female	0.87789	0.87789	
18	SM18	SM	female	0.91786	0.91786	
7	SM13	SM	male	0.95515	0.95515	
13	SM10	SM	female	1.03961	1.03961	
17	SM17	SM	male	1.05667	1.05667	
11	SM6	SM	female	1.1045	1.1045	
20	SM20	SM	female	1.10483	1.10483	
4	SM7	SM	male	1.29838	1.29838	
5	SM9	SM	male	1.31576	1.31576	
15	SM14	SM	female	1.60498	1.60498	
9	SM2	SM	female	2.08783		
1	SM1	SM	male	2.36554		

Fig11 VHM PDE10/Actin

squads	id	group	sex	$\geq 10/\text{actin}$	n	no outs
6	GH11	GH	male	0.05777	0.05777	
8	GH15	GH	male	0.13071	0.13071	
2	GH3	GH	male	0.19085	0.19085	
4	GH7	GH	male	0.19358	0.19358	
14	GH12	GH	female	0.43832	0.43832	
16	GH16	GH	female	0.52889	0.52889	
12	GH8	GH	female	0.58456	0.58456	
17	GH17	GH	male	0.59737	0.59737	
20	GH20	GH	female	0.73034	0.73034	
19	GH19	GH	male	0.77254	0.77254	
10	GH4	GH	female	1.01846	1.01846	
18	GH18	GH	female	1.05448	1.05448	
1	GH1	GH	male	1.08149	1.08149	
9	GH2	GH	female	1.10211	1.10211	
5	GH9	GH	male	1.34533	1.34533	
15	GH14	GH	female	1.36373	1.36373	
3	GH5	GH	male	1.62726	1.62726	
13	GH10	GH	female	1.75384	1.75384	
7	GH13	GH	male	1.77999	1.77999	
11	GH6	GH	female	2.40304		
4	SH7	SH	male	-0.0693	-0.0693	
14	SH12	SH	female	0.33182	0.33182	
12	SH8	SH	female	0.38611	0.38611	
3	SH5	SH	male	0.4273	0.4273	
17	SH17	SH	male	0.51884	0.51884	
2	SH3	SH	male	0.60451	0.60451	
9	SH2	SH	female	0.62983	0.62983	
18	SH18	SH	female	0.63336	0.63336	
16	SH16	SH	female	0.71899	0.71899	
13	SH10	SH	female	0.78529	0.78529	
10	SH4	SH	female	0.81997	0.81997	
19	SH19	SH	male	0.8375	0.8375	
15	SH14	SH	female	0.9173	0.9173	
20	SH20	SH	female	0.92819	0.92819	
7	SH13	SH	male	1.05122	1.05122	
6	SH11	SH	male	1.11405	1.11405	
1	SH1	SH	male	1.20031	1.20031	
11	SH6	SH	female	1.37146	1.37146	
5	SH9	SH	male	1.9686		
4	SD7	SD	male	0.09488	0.09488	
2	SD3	SD	male	0.11388	0.11388	
8	SD15	SD	male	0.20425	0.20425	
9	SD2	SD	female	0.25384	0.25384	
14	SD12	SD	female	0.37432	0.37432	
3	SD5	SD	male	0.54939	0.54939	
11	SD6	SD	female	0.55828	0.55828	
12	SD8	SD	female	0.55991	0.55991	
10	SD4	SD	female	0.64069	0.64069	
18	SD18	SD	female	0.7639	0.7639	
5	SD9	SD	male	0.77484	0.77484	
15	SD14	SD	female	0.82517	0.82517	
17	SD17	SD	male	0.8253	0.8253	
16	SD16	SD	female	0.8486	0.8486	
19	SD19	SD	male	0.90996	0.90996	
7	SD13	SD	male	0.91075	0.91075	
20	SD20	SD	female	0.92749	0.92749	
6	SD11	SD	male	1.14237	1.14237	
13	SD10	SD	female	1.31639	1.31639	
1	SD1	SD	male	3.12563		
5	SW9	SW	male	0.14262	0.14262	
8	SW15	SW	male	0.24275	0.24275	
14	SW12	SW	female	0.32167	0.32167	
6	SW11	SW	male	0.37565	0.37565	
2	SW3	SW	male	0.42188	0.42188	
18	SW18	SW	female	0.47866	0.47866	
12	SW8	SW	female	0.50817	0.50817	
11	SW6	SW	female	0.53164	0.53164	
10	SW4	SW	female	0.68147	0.68147	
17	SW17	SW	male	0.74444	0.74444	
16	SW16	SW	female	0.77412	0.77412	
1	SW1	SW	male	0.79481	0.79481	
15	SW14	SW	female	0.8663	0.8663	
4	SW7	SW	male	0.90789	0.90789	
20	SW20	SW	female	1.00496	1.00496	
13	SW10	SW	female	1.05647	1.05647	
3	SW5	SW	male	1.06674	1.06674	
19	SW19	SW	male	1.0913	1.0913	
9	SW2	SW	female	1.17784	1.17784	
7	SW13	SW	male	1.2246	1.2246	
1	SM1	SM	male	0.15717	0.15717	
2	SM3	SM	male	0.26227	0.26227	
6	SM11	SM	male	0.28919	0.28919	
8	SM15	SM	male	0.34918	0.34918	
14	SM12	SM	female	0.35512	0.35512	
4	SM7	SM	male	0.40529	0.40529	
12	SM8	SM	female	0.47969	0.47969	
16	SM16	SM	female	0.50831	0.50831	
10	SM4	SM	female	0.54108	0.54108	
11	SM6	SM	female	0.56994	0.56994	
15	SM14	SM	female	0.6014	0.6014	
18	SM18	SM	female	0.60241	0.60241	
5	SM9	SM	male	0.74238	0.74238	
17	SM17	SM	male	0.82216	0.82216	
20	SM20	SM	female	0.82901	0.82901	
19	SM19	SM	male	0.8334	0.8334	
9	SM2	SM	female	1.08752	1.08752	
13	SM10	SM	female	1.21957	1.21957	
7	SM13	SM	male	1.26406	1.26406	
3	SM5	SM	male	2.74974		

Fig2 VH M PDE11/Actin

squad	ID	Housing	Sex	vhm Actin /vhm actin:11/Actin:11/actin n n oouts n n oouts	VAR11	ID	Region	Housing	Sex	vd no gh out no s			
1 GH1	GH	Male	1.84946	0.54621	0.40969	0.26741	0.40969	0.26741	GH1	VH M	GH	Male	0.214343189
2 GH2	GH	Female	1.20072	0.35461	0.6062	0.39568	0.6062	0.39568	GH8	VH M	GH	Female	0.285071256
3 GH3	GH	Male	0.10394	0.0307	2.18114	1.42367	2.18114	1.42367	GH2	VH M	GH	Female	0.317154364
4 GH4	GH	Female	1.71685	0.50704	0.81316	0.53077	0.81316	0.53077	GH10	VH M	GH	Female	0.321474869
5 GH5	GH	Male	0.74552	0.22018	1.33644	0.87232	1.33644	0.87232	GH6	VH M	GH	Female	0.341838663
6 GH6	GH	Female	0.38351	0.11326	0.65338	0.42647	0.65338	0.42647	GH7	VH M	GH	Male	0.403927339
7 GH7	GH	Male	0.69947	0.20658	0.48822	0.31867	0.48822	0.31867	GH4	VH M	GH	Female	0.425437739
8 GH8	GH	Female	2.56364	0.75713	0.34456	0.2249	0.34456	0.2249	GH9	VH M	GH	Male	0.552844499
9 GH9	GH	Male	0.66096	0.1952	0.66821	0.43615	0.66821	0.43615	GHS	VH M	GH	Male	0.699211889
10 GH10	GH	Female	1.61711	0.47759	0.38856	0.25362	0.38856	0.25362	GH11	VH M	GH	Male	1.052625359
11 GH11	GH	Male	0.37219	0.10992	1.27228	0.83045	1.27228	0.83045	GHS	VH M	GH	Male	1.141146143
12 GH12	GH	Female	0.08663	0.02559	2.83817	1.85253			GH12	VH M	GH	Female	
1 SM1	SM	Male	1.24731	0.36837	0.96142	0.62754	0.96142	0.62754	SM10	VH M	SM	Female	0.195680355
2 SM2	SM	Female	1.7491	0.51657	0.67878	0.44306	0.67878	0.44306	SM9	VH M	SM	Male	0.217324458
3 SM3	SM	Male	0.12186	0.03599	4.9447	3.22751	4.9447	3.22751	SM8	VH M	SM	Female	0.345318274
4 SM4	SM	Female	0.49104	0.14502	1.0692	0.69789	1.0692	0.69789	SM2	VH M	SM	Female	0.355131276
5 SM5	SM	Male	0.8853	0.26146	0.88282	0.57623	0.88282	0.57623	SM5	VH M	SM	Male	0.461880907
6 SM6	SM	Female	0.82796	0.24452	2.41396	1.57564	2.41396	1.57564	SM1	VH M	SM	Male	0.503005208
7 SM7	SM	Male	0.33048	0.0976	1.92885	1.259	1.92885	1.259	SM11	VH M	SM	Male	0.541416112
8 SM8	SM	Female	1.09091	0.32218	0.41738	0.27243	0.41738	0.27243	SM4	VH M	SM	Female	0.55939396
9 SM9	SM	Male	1.42139	0.41978	0.26267	0.17145	0.26267	0.17145	SM6	VH M	SM	Female	1.262956798
10 SM10	SM	Female	1.96364	0.57993	0.23651	0.15438	0.23651	0.15438	SM7	VH M	SM	Male	1.59583979
11 SM11	SM	Male	1.2385	0.36577	0.6544	0.42714	0.6544	0.42714	SM3	VH M	SM	Male	2.587010102
12 SM12	SM	Female	0.04171	0.01232	8.07787	5.27259			SM12	VH M	SM	Female	

Fig2 VH C PDE11/Actin

squad	ID	Region	Housing	Sex	vhc Actin vhc actin:11/Actin:11/actin n n oouts 11/actin n n oouts	VAR23
12 GH12	VH C	GH	Female	0.84054	0.12405	0.58943
5 GH5	VH C	GH	Male	1.14545	0.16905	0.60745
1 GH1	VH C	GH	Male	0.97091	0.14329	0.68549
4 GH4	VH C	GH	Female	1.15091	0.16986	0.74476
10 GH10	VH C	GH	Female	1.27869	0.18871	0.77492
9 GH9	VH C	GH	Male	1.37705	0.20323	0.95342
2 GH2	VH C	GH	Female	1.04182	0.15376	0.96793
11 GH11	VH C	GH	Male	1.07303	0.15836	0.98116
8 GH8	VH C	GH	Female	0.71535	0.10557	1.28128
7 GH7	VH C	GH	Male	0.71535	0.10557	1.41979
6 GH6	VH C	GH	Female	0.62182	0.09177	1.47576
3 GH3	VH C	GH	Male	1.06908	0.15778	1.51862
4 SM4	VH C	SM	Female	2.02909	0.29946	0.65601
5 SM5	VH C	SM	Male	1.03091	0.15215	0.76298
10 SM10	VH C	SM	Female	0.81371	0.12000	0.89807
1 SM1	VH C	SM	Male	1.16727	0.17227	1.00213
3 SM3	VH C	SM	Male	0.80727	0.11914	1.0368
2 SM2	VH C	SM	Female	1.13455	0.16744	1.06659
7 SM7	VH C	SM	Male	0.84948	0.12537	1.10813
8 SM8	VH C	SM	Female	1.37705	0.20323	1.24125
11 SM11	VH C	SM	Male	0.8763	0.12933	1.34276
9 SM9	VH C	SM	Male	0.65276	0.09634	1.49901
12 SM12	VH C	SM	Female	0.48286	0.07126	1.87254
6 SM6	VH C	SM	Female	0.71455	0.10546	2.41325

Fig2 VH N PDE11/Actin

squad	ID	Region	Housing	Sex	vhn Actin vhn actin:11/Actin:11/actin n n oouts 11/actin n n oouts	VAR35
1 GH1	VH N	GH	Male	2.09002	0.41644	0.40711
7 GH7	VH N	GH	Male	0.75383	0.1502	0.56921
6 GH6	VH N	GH	Female	1.26223	0.2515	0.59979
10 GH10	VH N	GH	Female	2.86194	0.57024	0.62617
12 GH12	VH N	GH	Female	0.43380	0.08645	0.85319
3 GH3	VH N	GH	Male	0.44031	0.08773	0.98904
4 GH4	VH N	GH	Female	1.13307	0.22576	1.05842
8 GH8	VH N	GH	Female	0.93353	0.18601	1.0725
11 GH11	VH N	GH	Male	0.58729	0.11702	1.17473
2 GH2	VH N	GH	Female	0.58121	0.11581	1.38327
5 GH5	VH N	GH	Male	0.49315	0.09826	1.56236
9 GH9	VH N	GH	Male	0.42951	0.08558	1.7042
6 SM6	VH N	SM	Female	1.29746	0.25852	0.62998
11 SM11	VH N	SM	Male	0.71877	0.14322	0.66721
3 SM3	VH N	SM	Male	0.87476	0.1743	0.94972
12 SM12	VH N	SM	Female	0.2542	0.05065	0.95984
10 SM10	VH N	SM	Female	0.73192	0.14584	0.98858
2 SM2	VH N	SM	Female	0.66928	0.13335	1.08114
5 SM5	VH N	SM	Male	0.92172	0.18365	1.13393
4 SM4	VH N	SM	Female	0.51076	0.10177	1.28549
7 SM7	VH N	SM	Male	0.80205	0.15981	1.32175
9 SM9	VH N	SM	Male	0.63112	0.12575	1.38643
1 SM1	VH N	SM	Male	0.52830	0.10528	1.40748
8 SM8	VH N	SM	Female	0.36377	0.07248	1.87342

Fig 3B 3C nCamki

squads id	group	sex	kia/actin n o uts kib/actin n o uts kia/actin n o uts jia/cama a no outs VAR13	squads id	group	sex	kiab/actin :n o out :jib/camb :nb no out
5 GH9	GH	male	1.79692 1.79692 0.91994 0.91994 1.35251 1.35251 0.90809 0.90809	1 GH1	GH	male	0.82481 0.82481 0.87642 0.87642 1.27157 1.27157 1.27157 1.27157
12 GH8	GH	female	2.3339 2.3339 1.079 1.079 0.14216 0.14216 0.07322 0.07322	13 GH10	GH	female	1.03477 1.03477 1.52688 1.52688 1.52688 1.52688 1.52688 1.52688
4 GH7	GH	male	2.16496 2.16496 1.12268 1.12268 2.65052 2.65052 1.59585 1.59585	6 GH11	GH	male	1.20803 1.20803 1.37326 1.37326 1.37326 1.37326 1.37326 1.37326
11 GH6	GH	female	1.49159 1.49159 0.68393 0.68393 2.15377 2.15377 1.73588 1.73588	14 GH12	GH	female	2.29067 2.29067 2.62244 2.62244 2.62244 2.62244 2.62244 2.62244
3 GH5	GH	male	1.80912 1.80912 0.72159 0.72159 0.94579 0.94579 0.68145 0.68145	7 GH13	GH	male	0.64942 0.64942 0.8484 0.8484 0.8484 0.8484 0.8484 0.8484
10 GH4	GH	female	2.6769 2.6769 0.98248 0.98248 0.7889 0.7889 0.325 0.325	15 GH14	GH	female	2.67427 2.67427 3.92348 3.92348 3.92348 3.92348 3.92348 3.92348
2 GH3	GH	male	1.06996 1.06996 0.78587 0.78587 3.44913 3.44913 3.29886 3.29886	8 GH15	GH	male	1.72012 1.72012 2.10478 2.10478 2.10478 2.10478 2.10478 2.10478
20 GH20	GH	female	2.35353 2.35353 0.93266 0.93266 5.21244 5.21244 2.88074 2.88074	16 GH16	GH	female	1.51427 1.51427 1.27157 1.27157 1.27157 1.27157 1.27157 1.27157
9 GH2	GH	female	1.75755 1.75755 1.37188 1.37188 4.52408 4.52408 2.83868 2.83868	17 GH17	GH	male	1.19839 1.19839 0.9747 0.9747 0.9747 0.9747 0.9747 0.9747
19 GH19	GH	male	2.4601 2.4601 1.43696 1.43696 3.74844 3.74844 1.8978 1.8978	18 GH18	GH	female	0.89566 0.89566 0.93575 0.93575 0.93575 0.93575 0.93575 0.93575
18 GH18	GH	female	1.59676 1.59676 1.00788 1.00788 1.91405 1.91405 1.55918 1.55918	19 GH19	GH	male	2.81437 2.81437 2.20939 2.20939 2.20939 2.20939 2.20939 2.20939
17 GH17	GH	male	2.59307 2.59307 1.38694 1.38694 1.38694 1.38694 0.62879 0.62879	9 GH2	GH	female	1.82642 1.82642 1.46392 1.46392 1.46392 1.46392 1.46392 1.46392
16 GH16	GH	female	1.77066 1.77066 1.15196 1.15196 5.60938 5.60938 3.37063 3.37063	20 GH20	GH	female	2.29841 2.29841 2.59493 2.59493 2.59493 2.59493 2.59493 2.59493
8 GH15	GH	male	1.79518 1.79518 0.95218 0.95218 4.42503 4.42503 3.10004 3.10004	2 GH3	GH	male	2.28642 2.28642 3.37426 3.37426 3.37426 3.37426 3.37426 3.37426
15 GH14	GH	female	1.64037 1.64037 0.65933 0.65933 6.60994 6.60994 4.28734 4.28734	10 GH4	GH	female	0.73395 0.73395 0.82145 0.82145 0.82145 0.82145 0.82145 0.82145
7 GH13	GH	male	2.1204 2.1204 0.89185 0.89185 0 0 0 0	3 GH5	GH	male	1.55538 1.55538 2.19511 2.19511 2.19511 2.19511 2.19511 2.19511
14 GH12	GH	female	1.59141 1.59141 0.96795 0.96795 1.20456 1.20456 0.94008 0.94008	11 GH6	GH	female	0.92159 0.92159 1.52025 1.52025 1.52025 1.52025 1.52025 1.52025
6 GH11	GH	male	1.8446 1.8446 0.99463 0.99463 2.42061 2.42061 1.58322 1.58322	4 GH7	GH	male	1.70592 1.70592 1.54743 1.54743 1.54743 1.54743 1.54743 1.54743
13 GH10	GH	female	1.45474 1.45474 0.75099 0.75099 2.69468 2.69468 2.30236 2.30236	12 GH8	GH	female	0.95495 0.95495 0.9985 0.9985 0.9985 0.9985 0.9985 0.9985
1 GH1	GH	male	1.36277 1.36277 0.91049 0.91049 1.60689 1.60689 1.20554 1.20554	5 GH9	GH	male	0.58711 0.58711 0.72159 0.72159 0.72159 0.72159 0.72159 0.72159
5 SH9	SH	male	1.81904 1.81904 0.94104 0.94104 0.04904 0.04904 0.03253 0.03253	1 SH1	SH	male	1.02601 1.02601 1.0789 1.0789 1.0789 1.0789 1.0789 1.0789
12 SH8	SH	female	2.04167 2.04167 1.14078 1.14078 0.86411 0.86411 0.5088 0.5088	13 SH10	SH	female	1.34675 1.34675 1.24642 1.24642 1.24642 1.24642 1.24642 1.24642
4 SH7	SH	male	1.22834 1.22834 1.33278 1.33278 0.36122 0.36122 0.38332 0.38332	6 SH11	SH	male	0.86139 0.86139 0.8511 0.8511 0.8511 0.8511 0.8511 0.8511
11 SH6	SH	female	1.77684 1.77684 0.89403 0.89403 2.66725 2.66725 1.80461 1.80461	14 SH12	SH	female	0.64707 0.64707 1.06632 1.06632 1.06632 1.06632 1.06632 1.06632
3 SH5	SH	male	1.88589 1.88589 0.83115 0.83115 3.94508 3.94508 2.72678 2.72678	7 SH13	SH	male	1.69255 1.69255 2.54332 2.54332 2.54332 2.54332 2.54332 2.54332
10 SH4	SH	female	1.63148 1.63148 0.82953 0.82953 1.57759 1.57759 1.57759 1.57759	15 SH14	SH	female	1.21372 1.21372 1.21372 1.21372 1.21372 1.21372 1.21372 1.21372
2 SH3	SH	male	4.19762 4.19762 1.44158 1.44158 2.70266 2.70266 0.65827 0.65827	16 SH16	SH	female	1.4625 1.4625 1.21372 1.21372 1.21372 1.21372 1.21372 1.21372
20 SH20	SH	female	2.08036 2.08036 1.1106 1.1106 1.41664 1.41664 0.85874 0.85874	17 SH17	SH	male	0.83416 0.83416 1.02336 1.02336 1.02336 1.02336 1.02336 1.02336
9 SH2	SH	female	2.8777 2.8777 1.25532 1.25532 1.26003 1.26003 0.48287 0.48287	18 SH18	SH	female	0.68077 0.68077 0.92022 0.92022 0.92022 0.92022 0.92022 0.92022
19 SH19	SH	male	2.38045 2.38045 1.381 1.381 2.12367 2.12367 1.17024 1.17024	19 SH19	SH	male	1.68139 1.68139 1.37345 1.37345 1.37345 1.37345 1.37345 1.37345
18 SH18	SH	female	1.51313 1.51313 0.77899 0.77899 2.08006 2.08006 0.1767 0.1767	9 SH2	SH	female	0.72475 0.72475 0.63485 0.63485 0.63485 0.63485 0.63485 0.63485
17 SH17	SH	male	1.96039 1.96039 0.91951 0.91951 1.55423 1.55423 0.98747 0.98747	20 SH20	SH	female	1.52462 1.52462 1.44553 1.44553 1.44553 1.44553 1.44553 1.44553
16 SH16	SH	female	3.88328 3.88328 1.1656 1.1656 1.5165 1.5165 0.40183 0.40183	2 SH3	SH	male	2.49983 2.49983 2.01115 2.01115 2.01115 2.01115 2.01115 2.01115
15 SH14	SH	female	1.19377 1.19377 0.64374 0.64374 0.15293 0.15293 0.1363 0.1363	10 SH4	SH	female	2.68182 2.68182 3.55493 3.55493 3.55493 3.55493 3.55493 3.55493
7 SH13	SH	male	1.93671 1.93671 0.70702 0.70702 0.12944 0.12944 0.08405 0.08405	3 SH5	SH	male	2.49824 2.49824 3.061 3.061 3.061 3.061 3.061 3.061
14 SH12	SH	female	2.78553 2.78553 1.14433 1.14433 0.38825 0.38825 0.16816 0.16816	11 SH6	SH	female	1.67791 1.67791 2.11741 2.11741 2.11741 2.11741 2.11741 2.11741
6 SH11	SH	male	2.78553 2.78553 1.14433 1.14433 0.38825 0.38825 0.16816 0.16816	4 SH7	SH	male	0.72276 0.72276 0.55226 0.55226 0.55226 0.55226 0.55226 0.55226
13 SH10	SH	female	3.20095 3.20095 1.19734 1.19734 0.10565 0.10565 0.05070 0.05070	12 SH8	SH	female	1.9999 1.9999 1.97786 1.97786 1.97786 1.97786 1.97786 1.97786
1 SH1	SH	male	1.78493 1.78493 1.02971 1.02971 0.91065 0.91065 0.52161 0.52161	5 SH9	SH	male	0.55467 0.55467 0.66644 0.66644 0.66644 0.66644 0.66644 0.66644
5 SD9	SD	male	1.90641 1.90641 1.06461 1.06461 1.36738 1.36738 1.15091 1.15091	1 SD1	SD	male	0.44323 0.44323 0.90747 0.90747 0.90747 0.90747 0.90747 0.90747
12 SD8	SD	female	2.06075 2.06075 0.93777 0.93777 1.09377 1.09377 2.74716 2.74716	13 SD10	SD	female	0.92148 0.92148 0.94281 0.94281 0.94281 0.94281 0.94281 0.94281
4 SD7	SD	male	2.04535 2.04535 1.15247 1.15247 0.85489 0.85489 0.54482 0.54482	6 SD11	SD	male	0.73686 0.73686 1.53796 1.53796 1.53796 1.53796 1.53796 1.53796
11 SD6	SD	female	2.06746 2.06746 0.90328 0.90328 0.01142 0.01142 0.00664 0.00664	14 SD12	SD	female	1.28725 1.28725 0.96395 0.96395 0.96395 0.96395 0.96395 0.96395
3 SD5	SD	male	1.92458 1.92458 0.90629 0.90629 0.7212 0.7212 0.4823 0.4823	7 SD13	SD	male	0.74956 0.74956 0.92213 0.92213 0.92213 0.92213 0.92213 0.92213
10 SD4	SD	female	1.98669 1.98669 0.81418 0.81418 0.3941 0.3941 0.21876 0.21876	15 SD14	SD	female	0.59152 0.59152 0.46983 0.46983 0.46983 0.46983 0.46983 0.46983
2 SD3	SD	male	2.82937 2.82937 1.60916 1.60916 1.31287 1.31287 0.4744 0.4744	8 SD15	SD	male	0.77474 0.77474 0.62274 0.62274 0.62274 0.62274 0.62274 0.62274
20 SD20	SD	female	1.80668 1.80668 1.00204 1.00204 0.86704 0.86704 0.62442 0.62442	16 SD16	SD	female	1.2419 1.2419 1.74073 1.74073 1.74073 1.74073 1.74073 1.74073
9 SD2	SD	female	2.18343 2.18343 0.9987 0.9987 0.9887 0.9887 2.0915 2.0915	17 SD17	SD	male	1.19288 1.19288 1.54682 1.54682 1.54682 1.54682 1.54682 1.54682
19 SD19	SD	male	1.52227 1.52227 0.73155 0.73155 1.07696 1.07696 0.8738 0.8738	18 SD18	SD	female	1.45851 1.45851 1.65334 1.65334 1.65334 1.65334 1.65334 1.65334
18 SD18	SD	female	2.13289 2.13289 0.92889 0.92889 0.8253 0.8253 0.5033 0.5033	19 SD19	SD	male	0.97009 0.97009 1.49588 1.49588 1.49588 1.49588 1.49588 1.49588
17 SD17	SD	male	2.06134 2.06134 0.86995 0.86995 2.66232 2.66232 1.12527 1.12527	9 SD2	SD	female	0.66924 0.66924 0.73686 0.73686 0.73686 0.73686 0.73686 0.73686
16 SD16	SD	female	2.62052 2.62052 0.91527 0.91527 0.93352 0.93352 1.58816 1.58816	20 SD20	SD	female	1.52117 1.52117 1.59851 1.59851 1.59851 1.59851 1.59851 1.59851
8 SD15	SD	male	1.62271 1.62271 0.56647 0.56647 0.93352 0.93352 1.58816 1.58816	1 SD9	SD	male	1.32653 1.32653 1.09688 1.09688 1.09688 1.09688 1.09688 1.09688
5 SW9	SW	male	2.17241 2.17241 0.88927 0.88927 2.28794 2.28794 1.27064 1.27064	1 SW1	SW	male	0.56536 0.56536 0.81152 0.81152 0.81152 0.81152 0.81152 0.81152
12 SW8	SW	female	2.59204 2.59204 1.44042 1.44042 4.6333 4.6333 2.1489 2.1489	13 SW10	SW	female	1.59571 1.59571 1.53296 1.53296 1.53296 1.53296 1.53296 1.53296
4 SW7	SW	male	2.66031 2.66031 1.6362 1.6362 2.40969 2.40969 1.1807 1.1807	6 SW11	SW	male	2.67735 2.67735 3.32566 3.32566 3.32566 3.32566 3.32566 3.32566
11 SW6	SW	female	1.61846 1.61846 0.82474 0.82474 1.16061 1.16061 0.82896 0.82896	14 SW12	SW	female	1.92573 1.92573 2.00802 2.00802 2.00802 2.00802 2.00802 2.00802
7 SW5	SW	male	2.08159 2.08159 0.74236 0.74236 0.04452 0.04452 0.02788 0.02788	7 SW13	SW	male	1.03416 1.03416 1.05891 1.05891 1.05891 1.05891 1.05891 1.05891
10 SW4	SW	female	1.93096 1.93096 0.10559 0.10559 1.24111 1.24111 0.07088 0.07088	15 SW14	SW	female	1.17602 1.17602 0.68615 0.68615 0.68615 0.68615 0.68615 0.68615
2 SW3	SW	male	2.56348 2.56348 1.30015 1.30015 1.13667 1.13667 0.45334 0.45334	8 SW15	SW	male	2.5774 2.5774 2.83663 2.83663 2.83663 2.83663 2.83663 2.83663
20 SW20	SW	female	2.75017 2.75017 1.81168 1.81168 1.4194 1.4194 0.67132 0.67132	16 SW16	SW	female	1.49997 1.49997

Fig 3D 3E pS6

Fig 3F PDE11 Camkii Correlation

VAR1	VAR2	VAR3	VAR4	z11/actin	z11/actin	nA/camA	nB/camB
1 GH1	GH	male	1.3844	0.4513	1.2055	0.9023	
13 GH10	GH	female		0.4911	2.3024	1.572	
6 GH11	GH	male	0.1652	0.3577	1.5832	1.4139	
14 GH12	GH	female	1.0595	0.4565	0.9408	2.7	
7 GH13	GH	male	0.1834		0	0.8735	
15 GH14	GH	female	0.7663	0.4537			
8 GH15	GH	male	1.8338	0.2988	3.1	2.167	
16 GH16	GH	female	0.9249	0.2586	3.3706	1.3092	
17 GH17	GH	male	0.7593	0.4827	0.6288	0.9586	
18 GH18	GH	female	1.0547	0.6389	1.5592	1.022	
19 GH19	GH	male	0.5194	0.5422	1.8978	1.3317	
9 GH2	GH	female	1.2003	0.4751	2.8387	1.5072	
20 GH20	GH	female	1.0664	0.3698	2.8807	1.675	
2 GH3	GH	male	0.7622	0.2744	3.2989		
10 GH4	GH	female	0.5673	0.2952	0.325	0.8457	
3 GH5	GH	male	0.3097	0.6172	0.6815	2.26	
11 GH6	GH	female	0.3655	0.4765	1.7359	1.5652	
4 GH7	GH	male	0.6486	0.2083	1.5959	1.5932	
12 GH8	GH	female	1.0059	0.4151	0.0732	1.028	
5 GH9	GH	male	1.9337	0.5205	0.9081	0.7429	
1 SD1	SD	male	0.737	0.5426	0.5882	0.9343	
13 SD10	SD	female	0.3691	0.5812	0.1024	0.9707	
6 SD11	SD	male	0.6236	0.5422	0.4516	1.5834	
14 SD12	SD	female	0.2435	0.4176	0.2889	0.9924	
7 SD13	SD	male	0.6781	0.4455	0.5821	0.9494	
15 SD14	SD	female	0.8538	0.3904	0.4176	0.4837	
8 SD15	SD	male	0.7405	0.2571	0.7051	0.6411	
16 SD16	SD	female	0.6152	0.6735	0.058	1.7922	
17 SD17	SD	male	0.7655	0.5522		1.1902	
18 SD18	SD	female	0.5133	0.4532	0.5033	1.7654	
19 SD19	SD	male	1.0466	0.4869	0.8738	2.2849	
9 SD2	SD	female	0.5846	0.5211	0.5198	0.7586	
20 SD20	SD	female	0.4835	0.3887	0.6242	1.5663	
2 SD3	SD	male	0.4659	0.3751	0.4744	1.9181	
10 SD4	SD	female	0.2568	0.6497	0.2188		
3 SD5	SD	male		0.48	0.4823	0.7296	
11 SD6	SD	female	0.2821	0.6035	0.00664	1.0599	
4 SD7	SD	male	0.7109	0.3451	0.5448	0.6172	
12 SD8	SD	female	0.2379		0.1599	2.0913	
5 SD9	SD	male	1.1938	0.5312	0.7284	1.1293	
1 SH1	SH	male	0.3836	0.5354	0.5216	1.1108	
13 SH10	SH	female	0.1539	0.4714	0.0571	1.2833	
6 SH11	SH	male	0.3808	0.3889	0.1682	0.8763	
14 SH12	SH	female	0.3371	0.3606			
7 SH13	SH	male	0.4313	0.5192	0.0841	1.0978	
15 SH14	SH	female	0.3743	0.577	0.1363	2.6185	
16 SH16	SH	female	0.6311	0.6013	0.0418	1.2496	
17 SH17	SH	male	0.3471	0.2111	0.9875	0.9694	
18 SH18	SH	female	0.5548	0.4683	0.1767	1.2192	
19 SH19	SH	male	0.9102	0.3567	1.1702	1.2288	
9 SH2	SH	female	0.5661	0.4351	0.4828	0.6536	
20 SH20	SH	female	0.281	0.4114	0.8857	1.4181	
2 SH3	SH	male	0.4261	0.5305	0.6583	2.0706	
10 SH4	SH	female	0.4993	0.3834	1.5776		
3 SH5	SH	male	0.452	0.3446		3.1515	
11 SH6	SH	female	0.3849	0.4053	1.8046	2.18	
4 SH7	SH	male		0.4333	0.3833	0.5686	
12 SH8	SH	female		0.5074	0.5088	2.0363	
5 SH9	SH	male	0.3635	0.5894	0.0325	0.6861	
1 SM1	SM	male	1.1709	0.5313	0.8943	0.9603	
13 SM10	SM	female	0.7652	0.5802	0.1807	1.4758	
6 SM11	SM	male	0.1525	0.3814	1.2777	2.0489	
14 SM12	SM	female	0.3506	0.592	0.03	1.0024	
7 SM13	SM	male	0.1336		0.057	1.2671	
15 SM14	SM	female	0.6638	0.3786	0.2669	0.4972	
8 SM15	SM	male	0.9501	0.1742	1.9979		
16 SM16	SM	female	0.6687	0.5234	0.172	1.2399	
17 SM17	SM	male	0.3439	0.5768	0.6478	1.6635	
18 SM18	SM	female	0.7679	0.6163	0.5593	2.1965	
19 SM19	SM	male	0.5772	0.4776	0.3951	2.4227	
9 SM2	SM	female		0.4835		2.8646	
20 SM20	SM	female	0.9859	0.3737	1.3901	1.3552	
2 SM3	SM	male	0.4815	0.1946	1.2958	1.8765	
10 SM4	SM	female	0.2356	0.5725	0.013	0.5405	
3 SM5	SM	male	0.1224	0.7495	0.0977	2.9106	
11 SM6	SM	female	0.7349	0.479	1.6475	1.7896	
4 SM7	SM	male	0.9386	0.3559	2.0754	1.4835	
12 SM8	SM	female	0.5273	0.4114	0.8817	1.4349	
5 SM9	SM	male	1.0565	0.5311	1.1776	0.7898	
1 SW1	SW	male	0.4213		0.4058	0.8355	
13 SW10	SW	female	0.837	0.4441	2.6673	1.5783	
6 SW11	SW	male	0.3567	0.5592	2.1982		
14 SW12	SW	female	0.5142	0.4463	2.247	2.5833	
7 SW13	SW	male	0.184	0.7934	0.1442	1.0902	
15 SW14	SW	female	0.4209	0.5466	0.0198	0.7064	
8 SW15	SW	male	0.8916	0.0739	2.1462	2.9205	
16 SW16	SW	female	0.777	0.438	1.0256	1.7951	
17 SW17	SW	male	0.8152	0.7843	0.4953	1.6537	
18 SW18	SW	female	0.3885	0.8284	0.5456	2.3661	
19 SW19	SW	male	0.6114	0.3707	1.5744	2.0279	
9 SW2	SW	female	1.0063	0.4201	0.7073	0.9202	
20 SW20	SW	female	0.5999	0.2922	0.6713	1.1476	
2 SW3	SW	male	0.4631	0.3593	0.4533	1.6488	
10 SW4	SW	female	0.3303	0.6054	0.0708	1.3031	
3 SW5	SW	male	0.1486		0.0279	1.4289	
11 SW6	SW	female	0.3756	0.829	1.3084		
4 SW7	SW	male	0.7606	0.2805	1.1807	0.9883	
12 SW8	SW	female	0.5122	0.4104	2.1489	1.2376	
5 SW9	SW	male	0.4696	0.4395	1.2706	3.0367	

Fig3G PDF11/S6 Correlation

VAR1	VAR2	VAR3	VAR4	$\beta 11/\text{actin}$	$\beta 11/\text{actin}$ 6 no outs
1 GH1	GH	male	1.3844	0.4513	1.91843
13 GH10	GH	female	0.4911	0.70424	
6 GH11	GH	male	0.1652	0.3577	1.34409
14 GH12	GH	female	1.0595	0.4565	1.1165
7 GH13	GH	male	0.1834		0.63688
15 GH14	GH	female	0.7663	0.4537	2.90412
8 GH15	GH	male	1.8338	0.2988	2.24226
16 GH16	GH	female	0.9249	0.2586	2.46666
17 GH17	GH	male	0.7593	0.4827	1.70684
18 GH18	GH	female	1.0547	0.6389	2.31935
19 GH19	GH	male	0.5194	0.5422	1.37618
9 GH2	GH	female	1.2003	0.4751	1.27672
20 GH20	GH	female	1.0664	0.3698	2.04986
2 GH3	GH	male	0.7622	0.2744	1.25429
10 GH4	GH	female	0.5673	0.2952	2.79905
3 GH5	GH	male	0.3097	0.6172	2.29834
11 GH6	GH	female	0.3655	0.4765	
4 GH7	GH	male	0.6486	0.2083	1.17444
12 GH8	GH	female	1.0059	0.4151	0.84907
5 GH9	GH	male	1.9337	0.5205	0.80785
1 SD1	SD	male	0.737	0.5426	
13 SD10	SD	female	0.3691	0.5812	0.5821
6 SD11	SD	male	0.6236	0.5422	1.63523
14 SD12	SD	female	0.2435	0.4176	2.51068
7 SD13	SD	male	0.6781	0.4455	1.85965
15 SD14	SD	female	0.8538	0.3904	2.08652
8 SD15	SD	male	0.7405	0.2571	1.73653
16 SD16	SD	female	0.6152	0.6735	0.5127
17 SD17	SD	male	0.7655	0.5522	1.80733
18 SD18	SD	female	0.5133	0.4532	0.94972
19 SD19	SD	male	1.0466	0.4869	1.3559
9 SD2	SD	female	0.5846	0.5211	1.55823
20 SD20	SD	female	0.4835	0.3887	1.32258
2 SD3	SD	male	0.4659	0.3751	0.80555
10 SD4	SD	female	0.2568	0.6497	0.84022
3 SD5	SD	male		0.48	1.49512
11 SD6	SD	female	0.2821	0.6035	0.58969
4 SD7	SD	male	0.7109	0.3451	1.21329
12 SD8	SD	female	0.2379		0.51614
5 SD9	SD	male	1.1938	0.5312	0.98119
1 SH1	SH	male	0.3836	0.5354	0.7431
13 SH10	SH	female	0.1539	0.4714	0.89267
6 SH11	SH	male	0.3808	0.3889	1.89818
14 SH12	SH	female	0.3371	0.3606	
7 SH13	SH	male	0.4313	0.5192	1.43846
15 SH14	SH	female	0.3743	0.577	0.77593
16 SH16	SH	female	0.6311	0.6013	0.51676
17 SH17	SH	male	0.3471	0.2111	1.62745
18 SH18	SH	female	0.5548	0.6483	0.78697
19 SH19	SH	male	0.9102	0.3567	1.79834
9 SH2	SH	female	0.5661	0.4351	1.00509
20 SH20	SH	female	0.281	0.4114	1.21821
2 SH3	SH	male	0.4261	0.5305	0.97625
10 SH4	SH	female	0.4993	0.3834	2.03553
3 SH5	SH	male	0.452	0.3446	1.88812
11 SH6	SH	female	0.3849	0.4053	1.50367
4 SH7	SH	male		0.4333	1.23629
12 SH8	SH	female		0.5074	0.62429
5 SH9	SH	male	0.3635	0.5894	0.64188
1 SM1	SM	male	1.1709	0.5313	1.37237
13 SM10	SM	female	0.7652	0.5802	0.64081
6 SM11	SM	male	0.1525	0.3814	1.72133
14 SM12	SM	female	0.3506	0.592	1.57731
7 SM13	SM	male	0.1336		0.98545
15 SM14	SM	female	0.6638	0.3786	1.50593
8 SM15	SM	male	0.9501	0.1742	1.37889
16 SM16	SM	female	0.6687	0.5234	0.87516
17 SM17	SM	male	0.3439	0.5768	1.02597
18 SM18	SM	female	0.7679	0.6163	1.18463
19 SM19	SM	male	0.5772	0.4776	0.54114
9 SM2	SM	female		0.4835	
20 SM20	SM	female	0.9859	0.3737	1.41905
2 SM3	SM	male	0.4815	0.1946	0.79649
10 SM4	SM	female	0.2356	0.5725	0.25481
3 SM5	SM	male	0.1224	0.7495	0.63558
11 SM6	SM	female	0.7349	0.479	1.46078
4 SM7	SM	male	0.9386	0.3559	1.06312
12 SM8	SM	female	0.5273	0.4114	1.11076
5 SM9	SM	male	1.0565	0.5311	1.29038
1 SW1	SW	male	0.4213		2.03971
13 SW10	SW	female	0.837	0.4441	
6 SW11	SW	male	0.3567	0.5592	
14 SW12	SW	female	0.5142	0.4463	1.84239
7 SW13	SW	male	0.184	0.7934	1.29806
15 SW14	SW	female	0.4209	0.5466	0.9772
8 SW15	SW	male	0.8916	0.0739	0.97209
16 SW16	SW	female	0.777	0.438	1.32155
17 SW17	SW	male	0.8152	0.7843	1.57965
18 SW18	SW	female	0.3885	0.8284	1.01591
19 SW19	SW	male	0.6114	0.3707	1.12373
9 SW2	SW	female	1.0063	0.4201	1.48963
20 SW20	SW	female	0.5999	0.2922	1.67626
2 SW3	SW	male	0.4631	0.3593	0.78444
10 SW4	SW	female	0.3303	0.6054	0.42618
3 SW5	SW	male	0.1486		0.94478
11 SW6	SW	female		0.3756	1.29783
4 SW7	SW	male	0.7606	0.2805	1.99345
12 SW8	SW	female	0.5122	0.4104	1.48972
5 SW9	SW	male	0.4696	0.4395	0.78302

Fig 3H SOR

mouse	SEX	Condition	24h total	7d total	24hr ratio	7dratio	24hr ratio no out	7dratio no outs
1109	FEMALE	GH	39	21	0.666666667	-0.3	0.666666667	-0.3
1107	FEMALE	GH	34	23	0.225806452	-0.238095238	0.225806452	-0.238095238
1894	FEMALE	GH	37	18	0.454545455	-0.176470588	0.454545455	-0.176470588
1901	FEMALE	GH	26	11	0.52	0	0.52	0
945	MALE	GH	22	26	0.727272727	0	0.727272727	0
946	FEMALE	GH	44	31	0.590909091	0.066666667	0.590909091	0.066666667
1170	MALE	GH	34	28	0.6875	0.076923077	0.6875	0.076923077
1896	MALE	GH	8	9	0.428571429	0.111111111	0.428571429	0.111111111
1897	MALE	GH	26	9	-0.142857143	0.142857143	-0.142857143	0.142857143
1173	MALE	GH	27	39	0.333333333	0.179487179	0.333333333	0.179487179
1895	FEMALE	GH	61	38	-0.5	0.2		0.2
1174	MALE	GH	26	15	0.826086957	0.2	0.826086957	0.2
944	FEMALE	GH	31	36	0.35483871	0.257142857	0.35483871	0.257142857
1106	FEMALE	GH	29	29	0.5	0.285714286	0.5	0.285714286
943	MALE	GH	27	39	0.851851852	0.351351351	0.851851852	0.351351351
1110	FEMALE	GH	20	23	0.375	0.363636364	0.375	0.363636364
1108	FEMALE	GH	27	33	0.28	0.4375	0.28	0.4375
1905	MALE	GH	16	11	0.066666667	0.454545455	0.066666667	0.454545455
1904	MALE	GH	25	27	0.75	0.769230769	0.75	0.769230769
1898	FEMALE	SH	37	28	-0.454545455	-0.44		
1968	FEMALE	SH	19	16	0.444444444	0.142857143	0.444444444	0.142857143
1909	MALE	SH	43	18	0.487179487	0.222222222	0.487179487	0.222222222
941	MALE	SH	49	43	0.458333333	0.238095238	0.458333333	0.238095238
1899	FEMALE	SH	34	46	0.032258065	0.244444444	0.032258065	0.244444444
924	FEMALE	SH	35	32	0.454545455	0.25	0.454545455	0.25
1115	FEMALE	SH	37	39	0.777777778	0.315789474	0.777777778	0.315789474
1907	MALE	SH	48	41	0.288888889	0.35	0.288888889	0.35
1908	MALE	SH	28	35	0.5	0.352941176	0.5	0.352941176
1112	FEMALE	SH	50	44	0.375	0.476190476	0.375	0.476190476
1114	MALE	SH	40	40	0.230769231	0.487179487	0.230769231	0.487179487
1906	MALE	SH	54	30	0.346153846	0.5	0.346153846	0.5
942	FEMALE	SH	49	54	0.510204082	0.538461538	0.510204082	0.538461538
1900	MALE	SH	42	49	0.384615385	0.551020408	0.384615385	0.551020408
1176	MALE	SH	36	32	0.352941176	0.625	0.352941176	0.625
1111	FEMALE	SH	33	30	0.333333333	0.714285714	0.333333333	0.714285714
925	MALE	SH	36	41	0.666666667	0.722222222	0.666666667	0.722222222
1113	FEMALE	SH	67	38	0.8125	0.722222222	0.8125	0.722222222
1171	MALE	SH	30	33	0.379310345	0.75	0.379310345	0.75
1105	MALE	SH	62	47	0.737704918	0.826086957	0.737704918	0.826086957
1116	FEMALE	HT	37	34	0.166666667	-0.161290323	0.166666667	-0.161290323
1124	MALE	HT	17	39	0.058823529	-0.111111111	0.058823529	-0.111111111
1025	FEMALE	HT	44	30	0.142857143	-0.066666667	0.142857143	-0.066666667
1151	FEMALE	HT	38	32	0.166666667	0.133333333	0.166666667	0.133333333
1022	FEMALE	HT	50	40	0.361702128	0.45	0.361702128	0.45
1153	MALE	HT	31	52	0.24137931	0.461538462	0.24137931	0.461538462
1117	FEMALE	HT	30	21	0.466666667	0.6	0.466666667	0.6
1120	FEMALE	HT	49	23	0.644444444	0.619047619	0.644444444	0.619047619
1118	MALE	HT	59	38	0.5	0.631578947	0.5	0.631578947
1152	FEMALE	HT	30	41	0.517241379	0.853658537	0.517241379	0.853658537

Fig 3I NSOR

mouse	SEX	Condition	24hr ratio	7dratio	24hr ratio	7dratio no outs
1905	MALE	GH	-0.2	0.333333		0.333333
946	FEMALE	GH	0	0.25	0	0.25
1109	FEMALE	GH	0.14285714	0.888889	0.142857	0.888889
1107	FEMALE	GH	0.18518519	0.125	0.185185	0.125
1894	FEMALE	GH	0.2	0	0.2	0
1904	MALE	GH	0.2	0.142857	0.2	0.142857
943	MALE	GH	0.25	0.444444	0.25	0.444444
1895	FEMALE	GH	0.25	0.555556	0.25	0.555556
1901	FEMALE	GH	0.33333333	0.333333	0.333333	0.333333
1173	MALE	GH	0.375	0.909091	0.375	0.909091
944	FEMALE	GH	0.3877551	0.647059	0.387755	0.647059
1174	MALE	GH	0.42857143	0.428571	0.428571	0.428571
1896	MALE	GH	0.45454545	0.454545	0.454545	0.454545
1106	FEMALE	GH	0.47826087	0.333333	0.478261	0.333333
945	MALE	GH	0.5	1	0.5	1
1897	MALE	GH	0.6	0.142857	0.6	0.142857
1110	FEMALE	GH	0.7	0.818182	0.7	0.818182
1170	MALE	GH	0.75	-0.33333	0.75	
1108	FEMALE	GH	0.92857143	0.578947	0.928571	0.578947
1114	MALE	SH	0.11111111	1		1
1908	MALE	SH	0.16666667	0.043478	0.166667	0.043478
1111	FEMALE	SH	0.28571429	0.5	0.285714	0.5
1899	FEMALE	SH	0.29411765	0.636364	0.294118	0.636364
1900	MALE	SH	0.42857143	0.6	0.428571	0.6
1115	FEMALE	SH	0.43396226	-0.37931	0.433962	
1907	MALE	SH	0.5	0.8	0.5	0.8
1112	FEMALE	SH	0.52380952	0.6	0.52381	0.6
942	FEMALE	SH	0.53846154	-0.37931	0.538462	-0.37931
1176	MALE	SH	0.55555556	0.727273	0.555556	0.727273
1898	FEMALE	SH	0.58823529	0.8	0.588235	0.8
1105	MALE	SH	0.6	0.793103	0.6	0.793103
1171	MALE	SH	0.6	0.368421	0.6	0.368421
1906	MALE	SH	0.6	0.375	0.6	0.375
1968	FEMALE	SH	0.61538462	-0.33333	0.615385	-0.33333
924	FEMALE	SH	0.64705882	0.636364	0.647059	0.636364
1909	MALE	SH	0.67741935	0.866667	0.677419	0.866667
1113	FEMALE	SH	0.7037037	0.411765	0.703704	0.411765
925	MALE	SH	0.77272727	0.176471	0.772727	0.176471
941	MALE	SH	0.78947368	0.846154	0.789474	0.846154

Table 1

FieldA										FieldB															
squads	id	group	sex	cd actin	cdpde11	cd il6	VAR8	VAR9	squads	id	group	sex	cd actin	cdpde11	cd il6	VAR17	VAR18	squads	id	group	sex	cd actin	cdpde11	cd il6	VAR26
1	GH1	GH	male	0.07451	1.42978	2.65174			1	GH1	GH	male	0.0745	1.4295	2.6517			1	GH1	GH	male	0.0745	1.4299	2.6517	
1	SM1	SM	male	0.07096	1.20943	1.15657			2	GH1	GH	male	0.1738	0.7873	0.8101			2	GH3	GH	male	0.1738	0.7873	0.8101	
1	SW1	SW	male	0.38081	0.43518	1.7294			3	GH5	GH	male	0.3089	0.3199	1.4635			3	GH5	GH	male	0.3089	0.3199	1.4635	
1	SD1	SD	male	0.09816	0.76123	2.26049			4	GH7	GH	male	0.2966	0.6699	0.8227			4	GH7	GH	male	0.2966	0.6699	0.8227	
1	SH1	SH	male	0.046123	0.78719	0.8107			5	GH9	GH	male	0.0929	1.3093	1.3812			5	GH9	GH	male	0.0929	1.3093	1.3812	
2	GH3	GH	male	0.1738	0.7873	0.81009			6	GH11	GH	male	0.3382	1.1708	0.8605			6	GH11	GH	male	0.3382	1.1708	0.8605	
2	SM3	SM	male	0.42102	0.49729	0.8519			7	GH13	GH	male	0.5009	1.8944	1.2198			7	GH13	GH	male	0.5009	1.8944	1.2198	
2	SW3	SW	male	0.56767	0.4783	0.64605			8	GH15	GH	male	0.0908	1.8941	1.174			8	GH15	GH	male	0.0909	1.8941	1.174	
2	SD3	SD	male	0.53811	0.48121	0.62324			9	GH2	GH	female	0.1057	1.2398	1.4276			9	GH2	GH	female	0.1057	1.2398	1.4276	
2	SH8	SH	male	0.56649	0.44012	0.61645			10	GH4	GH	female	0.4914	0.586	1.1038			10	GH4	GH	female	0.4914	0.586	1.1038	
3	GH8	GH	male	0.30886	0.3199	1.46355			11	GH6	GH	female	0.5514	0.3775	1.6098			11	GH6	GH	female	0.5514	0.3775	1.6098	
3	SM5	SM	male	0.09322	0.12641	0.813			12	GH8	GH	female	0.1391	1.2051	1.8051			12	GH8	GH	female	0.1391	1.2051	1.8051	
3	SW5	SW	male	0.73489	0.15347	1.74795			13	GH10	GH	female	0.383	1.139	1.7148			13	GH10	GH	female	0.383	1.139	1.7148	
3	SD5	SD	male	0.0669	0.94123	1.41268			14	GH12	GH	female	0.0521	1.0943	1.1621			14	GH12	GH	female	0.0521	1.0943	1.1621	
3	SH5	SH	male	0.25534	0.46687	1.56334			15	GH14	GH	female	0.2395	0.7915	0.8232			15	GH14	GH	female	0.2395	0.7915	0.8232	
4	GH7	GH	male	0.29659	0.66989	0.82269			16	GH16	GH	female	0.3328	0.9553	0.7024			16	GH16	GH	female	0.3328	0.9553	0.7024	
4	SM7	SM	male	0.1706	0.96948	1.52324			1	SD1	SD	male	0.0982	0.7612	2.2605			1	SM1	SM	male	0.071	1.2094	1.1566	
4	SW7	SW	male	0.15722	0.78528	1.23733			2	SD3	SD	male	0.5381	0.4812	0.6232			2	SM3	SM	male	0.421	0.4973	0.8519	
4	SD7	SD	male	0.34642	0.73423	0.77			3	SD5	SD	male	0.0608	0.9593	1.41212			3	SM5	SM	male	0.0608	0.9593	1.41212	
4	FH7	SH	male	0.23452	1.14423	1.2776			4	SD7	SD	male	0.5441	0.7242	0.4664			4	SM7	SM	male	0.1706	0.8695	1.2323	
5	GH9	GH	male	0.09831	1.99731	1.3811			5	SD9	SD	male	0.2073	1.233	1.012			5	SM9	SM	male	0.1238	1.0913	0.8912	
5	SM9	SM	male	0.12378	1.09127	0.8912			6	SD11	SD	male	0.4742	0.6441	0.9105			6	SM11	SM	male	0.4325	0.1576	0.8423	
5	SW9	SW	male	0.37134	0.48501	0.9811			7	SD13	SD	male	0.3183	0.7004	0.9354			7	SM13	SM	male	0.4211	0.138	2.4061	
5	SD9	SD	male	0.20726	1.233	1.01196			8	SD15	SD	male	0.2822	0.7648	0.3273			8	SM15	SM	male	0.2767	0.9818	0.7267	1.497
5	SH9	SH	male	0.46593	0.37548	1.76211			9	SD2	SD	female	0.1529	0.6038	0.869			9	SM2	SM	female	0.0586	0.9586	2.3784	
6	GH11	GH	male	0.12362	0.78508	0.9068			10	SD4	SD	female	0.4863	0.2914	1.275			10	SM4	SM	female	0.2627	0.4348	0.906	
6	SM11	SM	male	0.43351	0.15756	0.84234			11	SD6	SD	female	0.5702	0.2914	2.4852			11	SM6	SM	female	0.3824	0.759	1.0593	
6	SW11	SW	male	0.3699	0.36846	1.00454			12	SD8	SD	female	0.4625	0.2457	1.2319			12	SM8	SM	female	0.2174	0.5446	0.3638	
6	SD11	SD	male	0.47425	0.64046	0.91052			13	SD10	SD	female	0.5162	0.3812	2.1089			13	SM10	SM	female	0.3699	0.7903	2.4033	
6	SH11	SH	male	0.4764	0.39337	0.79519			14	SD12	SD	female	0.3969	0.2515	0.862			14	SM12	SM	female	0.2756	0.3621	1.2769	
7	GH13	GH	male	0.50092	0.18938	2.61978			15	SD14	SD	female	0.2926	0.8819	0.8929			15	SM14	SM	female	0.2765	0.6857	0.7305	
7	SM13	SM	male	0.04245	0.74057	2.40535			16	SD16	SD	female	0.3542	0.2913	1.9374			16	SM16	SM	female	0.4108	0.6906	0.7634	
7	SW13	SW	male	0.44295	0.19007	1.94727			1	SW1	SW	male	0.3808	0.4352	0.2964			1	SW1	SW	male	0.3808	0.4352	0.2964	
7	SD13	SD	male	0.31827	0.70044	0.93537			2	SW3	SW	male	0.5677	0.4783	0.6461			2	SW3	SW	male	0.5677	0.4783	0.6461	
7	SH13	SH	male	0.50311	0.45456	1.03093			3	SW5	SW	male	0.7348	0.1535	1.7476			3	SW5	SW	male	0.7348	0.1535	1.7476	
8	GH15	GH	male	0.09078	1.89407	1.17402			4	SW7	SW	male	0.1572	0.7855	1.2373			4	SW7	SW	male	0.1572	0.7855	1.2373	
8	SM15	SM	male	0.27671	0.98135	0.72666			5	SW9	SW	male	0.3713	0.485	0.9811			5	SW9	SW	male	0.3713	0.485	0.9811	
8	SW15	SW	male	0.18156	0.92091	0.19958			6	SW11	SW	male	0.3699	0.3685	1.0045			6	SW11	SW	male	0.3699	0.3685	1.0045	
8	SD15	SD	male	0.50218	0.76482	0.37245			7	SW13	SW	male	0.3542	0.2913	1.9374			7	SW13	SW	male	0.3542	0.2913	1.9374	
9	GH2	GH	male	0.10926	1.33977	1.2727			8	SW15	SW	male	0.4863	0.2909	0.1986			8	SW15	SW	male	0.4863	0.2909	0.1986	
9	SM2	SM	female	0.05857	2.3784	1.49701			9	SW2	SW	female	0.0986	1.0393	1.1884			9	SW2	SW	female	0.0986	1.0393	1.1884	
9	SW2	SW	female	0.09857	1.03934	1.18841			10	SW4	SW	female	0.4843	0.3411	0.8984			10	SW4	SW	female	0.4843	0.3411	0.8984	
9	SD2	SD	female	0.15286	0.60381	0.69952			11	SW6	SW	female	0.168	0.8262	1.6483			11	SW6	SW	female	0.168	0.8262	1.6483	
9	SH2	SH	female	0.2571	0.58474	1.64541			12	SW8	SW	female	0.3429	0.5291	1.1249			12	SW8	SW	female	0.3429	0.5291	1.1249	
10	GH4	GH	female	0.49142	0.58998	1.03082			13	SW10	SW	female	0.3398	0.8645	1.0165			13	SW10	SW	female	0.3398	0.8645	1.0165	
10	SM4	SM	female	0.37099	0.29139	0.77			14	SW12	SW	female	0.2242	0.7855	1.0045			14	SW12	SW	female	0.2242	0.7855	1.0045	
10	SW4	SW	female	0.48432	0.34114	0.90395			15	SW14	SW	female	0.3312	0.4348	1.6758			15	SW14	SW	female	0.3312	0.4348	1.6758	
10	SD4	SD	female	0.48714	0.26525	1.27601			16	SW16	SW	female	0.3715	0.8025	0.8316			16	SW16	SW	female	0.3715	0.8025	0.8316	
10	SH4	SH	female	0.62825	0.15158	0.72349			1	SM1	SM	male	0.071	1.2094	1.1566			1	SM1	SM	male	0.071	1.2094	1.1566	
11	GH6	GH	female	0.55119	0.37755	1.60977			2	SM3	SM	male	0.421	0.4973	0.8519			2	SM3	SM	male	0.421	0.4973	0.8519	
11	SM6	SM	female	0.38242	0.75903	1.05925			3	SM5	SM	male	0.6032	0.1264	2.0113			3	SM5	SM	male	0.6032	0.1264	2.0113	
11	SW6	SW	female	0.57099	0.29139	0.77			4	SM7	SM	male	0.1706	0.9695	1.2523			4	SM7	SM	male	0.1706	0.9695	1.2523	
11	SH6	SH																							

Fig4B VHC IL6

Fig AC PGC116 Correlation

squad id	group	sex	c:i6 fem de11 fem de11 fem VAR8	squad id	group	sex	c:i6 male e11 male e11 male VAR16	squad id	group	sex	c:i6 both le11 both le11 both	VAR24	VAR25	VAR26	VAR27	VAR28	VAR29	VAR30
13 GH10	GH	females	0.5193 0.5556 2.1339	1 GH1	GH	males	1.4891 0.5105 1.4299	13 GH10	GH	females	0.5193 0.5556 2.1339							
14 GH11	GH	females	0.5193 0.5556 2.1339	2 GH1	GH	males	0.7552 0.4046 0.1895	14 GH11	GH	females	0.5193 0.5556 2.1339							
15 GH12	GH	females	0.7677 0.5132 0.7915	3 GH1	GH	males	0.5517 0.338 0.1894	15 GH12	GH	females	0.7677 0.5132 0.7915							
16 GH13	GH	females	1.1927 0.2925 0.9553	4 GH1	GH	males	0.4796 0.1104 0.7873	16 GH13	GH	females	1.1927 0.2925 0.9553							
9 GH2	GH	females	1.2145 0.5374 1.2398	5 GH1	GH	males	0.8494 0.2649 0.1899	9 GH2	GH	females	1.2145 0.5374 1.2398							
10 GH4	GH	females	1.2145 0.5374 1.2398	6 GH1	GH	males	0.7236 0.6699	10 GH4	GH	females	1.2145 0.5374 1.2398							
11 GH6	GH	females	1.5211 0.539 0.3778	7 GH1	GH	males	0.7236 0.6699	11 GH6	GH	females	1.5211 0.539 0.3778							
12 GH8	GH	females	1.1212 0.4695 1.0389	8 GH1	GH	males	0.7116 0.5888 1.9973	12 GH8	GH	females	1.1212 0.4695 1.0389							
13 GH10	GH	females	1.2308 0.5374 1.2398	9 GH1	GH	males	0.8481 0.2642 0.1892	13 GH10	GH	females	1.2308 0.5374 1.2398							
14 SD12	SD	females	1.804 0.4723 0.2518	10 GH1	GH	males	0.3379 0.6133 0.6441	14 SD12	GH	females	1.804 0.4723 0.2518							
15 SD14	SD	females	1.0046 0.4416 0.8813	11 GH1	GH	males	0.2771 0.0309 0.7004	15 SD14	GH	females	1.0046 0.4416 0.8813							
16 SD16	SD	females	1.8043 0.7618 0.6354	12 GH1	GH	males	0.4733 0.2909 0.7648	16 SD16	GH	females	1.8043 0.7618 0.6354							
9 SD2	SD	females	0.5211 0.539 0.3778	13 GH1	GH	males	1.2145 0.5374 1.2398	9 SD2	GH	females	0.5211 0.539 0.3778							
10 SD4	SD	females	1.2308 0.5374 1.2398	14 GH1	GH	males	0.4733 0.2909 0.7648	10 SD4	GH	females	1.2308 0.5374 1.2398							
11 SD6	SD	females	2.5369 0.7349 0.2651	15 GH1	GH	males	0.4162 0.5429	11 SD6	GH	females	2.5369 0.7349 0.2651							
12 SD8	SD	females	0.6371 0.6826 0.2914	16 GH1	GH	males	0.5831 0.3903 0.7342	12 SD8	GH	females	0.6371 0.6826 0.2914							
13 SD10	SD	females	1.2308 0.5374 1.2398	17 GH1	GH	males	0.5831 0.3903 0.7342	13 SD10	GH	females	1.2308 0.5374 1.2398							
14 SD12	SH	females	1.943 0.5333 0.1589	1 SH1	SH	males	1.149 0.6056 0.3982	14 SD12	GH	females	1.943 0.5333 0.1589							
15 SH14	SH	females	1.8768 0.408 0.3482	2 SH1	SH	males	1.2715 0.4399 0.3934	15 SH14	GH	females	1.8768 0.408 0.3482							
16 SH16	SH	females	1.8062 0.6237 0.3864	3 SH1	SH	males	0.2774 0.5873 0.4455	16 SH16	GH	females	1.8062 0.6237 0.3864							
9 SH2	SH	females	1.8068 0.6237 0.3864	4 SH1	SH	males	0.3043 0.5818 0.4454	9 SH2	GH	females	1.8068 0.6237 0.3864							
10 SH4	SH	females	0.4922 0.5847	5 SH1	SH	males	0.19 0.3898 0.4669	10 SH4	GH	females	0.4922 0.5847							
11 SH6	SH	females	1.7818 0.4337 0.5157	6 SH1	SH	males	0.9112 0.4901	11 SH6	GH	females	1.7818 0.4337 0.5157							
12 SH8	SH	females	1.4587 0.5374 0.3979	7 SH1	SH	males	0.4733 0.2909 0.7648	12 SH8	GH	females	1.4587 0.5374 0.3979							
13 SH10	SH	females	1.6263 0.5739	8 SH1	SH	males	0.6948 0.601 1.2094	13 SH10	GH	females	1.6263 0.5739							
14 SH12	SH	females	0.8919 0.5374 0.5111	9 SH1	SH	males	0.3043 0.6325 0.3985	14 SH12	GH	females	0.8919 0.5374 0.5111							
15 SH14	SH	females	0.761 0.6183 0.4346	10 SH1	SH	males	0.4436 0.0835 0.9209	15 SH14	GH	females	0.761 0.6183 0.4346							
16 SH16	SH	females	1.7009 0.4955 0.8025	11 SH1	SH	males	0.3113 0.4064 0.4783	16 SH16	GH	females	1.7009 0.4955 0.8025							
9 SH18	SW	females	0.6483 0.5374 1.2398	12 SW1	SW	males	0.2881 0.5429	9 SH18	GH	females	0.6483 0.5374 1.2398							
10 SW4	SW	females	1.1709 0.6848 0.3411	13 SW1	SW	males	1.2294 0.3173 0.7856	10 SW4	GH	females	1.1709 0.6848 0.3411							
11 SW6	SW	females	0.574 0.4249	14 SW1	SW	males	1.2547 0.4972 0.485	11 SW6	GH	females	0.574 0.4249							
12 SW8	SW	females	1.4009 0.4642 0.5291	15 SW1	SW	males	1.2294 0.3173 0.7856	12 SW8	GH	females	1.4009 0.4642 0.5291							
13 SW10	SW	females	1.2308 0.5374 1.2398	16 SW1	SW	males	1.2294 0.3173 0.7856	13 SW10	GH	females	1.2308 0.5374 1.2398							
14 SW12	SW	females	0.5211 0.539 0.3778	17 SW1	SW	males	1.2294 0.3173 0.7856	14 SW12	GH	females	0.5211 0.539 0.3778							
15 SW14	SW	females	1.804 0.4723 0.2518	1 SH2	SH	males	1.2715 0.4399 0.3934	15 SW14	GH	females	1.804 0.4723 0.2518							
16 SW16	SW	females	1.1124 0.5921 0.6906	2 SH2	SH	males	0.2774 0.5873 0.4455	16 SW16	GH	females	1.1124 0.5921 0.6906							
9 SW2	SW	females	0.5211 0.539 0.3778	3 SH2	SH	males	0.19 0.3898 0.4669	9 SW2	GH	females	0.5211 0.539 0.3778							
10 SW4	SW	females	1.2308 0.5374 1.2398	4 SH2	SH	males	0.9112 0.4601 1.2094	10 SW4	GH	females	1.2308 0.5374 1.2398							
11 SW6	SW	females	0.574 0.4249	5 SH2	SH	males	0.6862 0.6008 1.0913	11 SW6	GH	females	0.574 0.4249							
12 SW8	SW	females	1.4009 0.4642 0.5291	6 SH2	SH	males	0.6862 0.6008 1.0913	12 SW8	GH	females	1.4009 0.4642 0.5291							
13 SW10	SW	females	1.2308 0.5374 1.2398	7 SH2	SH	males	0.6862 0.6008 1.0913	13 SW10	GH	females	1.2308 0.5374 1.2398							
14 SW12	SW	females	0.5211 0.539 0.3778	8 SH2	SH	males	0.19 0.3898 0.4669	14 SW12	GH	females	0.5211 0.539 0.3778							
15 SW14	SW	females	1.804 0.4723 0.2518	9 SH2	SH	males	0.9112 0.4601 1.2094	15 SW14	GH	females	1.804 0.4723 0.2518							
16 SW16	SW	females	1.1124 0.5921 0.6906	10 SH3	SH	males	0.6862 0.6008 1.0913	16 SW16	GH	females	1.1124 0.5921 0.6906							
9 SW18	SW	females	0.5211 0.539 0.3778	11 SH3	SH	males	0.19 0.3898 0.4669	9 SW18	GH	females	0.5211 0.539 0.3778							
10 SW20	SW	females	1.2308 0.5374 1.2398	12 SH3	SH	males	0.9112 0.4601 1.2094	10 SW20	GH	females	1.2308 0.5374 1.2398							
11 SW22	SW	females	0.574 0.4249	13 SH3	SH	males	0.6862 0.6008 1.0913	11 SW22	GH	females	0.574 0.4249							
12 SW24	SW	females	1.4009 0.4642 0.5291	14 SH3	SH	males	0.6862 0.6008 1.0913	12 SW24	GH	females	1.4009 0.4642 0.5291							
13 SW26	SW	females	1.2308 0.5374 1.2398	15 SH3	SH	males	0.6862 0.6008 1.0913	13 SW26	GH	females	1.2308 0.5374 1.2398							
14 SW28	SW	females	0.5211 0.539 0.3778	16 SH3	SH	males	0.19 0.3898 0.4669	14 SW28	GH	females	0.5211 0.539 0.3778							
15 SW30	SW	females	1.804 0.4723 0.2518	17 SH3	SH	males	0.9112 0.4601 1.2094	15 SW30	GH	females	1.804 0.4723 0.2518							
16 SW32	SW	females	1.1124 0.5921 0.6906	1 SH4	SH	males	0.6862 0.6008 1.0913	16 SW32	GH	females	1.1124 0.5921 0.6906							
9 SW34	SW	females	0.5211 0.539 0.3778	2 SH4	SH	males	0.19 0.3898 0.4669	9 SW34	GH	females	0.5211 0.539 0.3778							
10 SW36	SW	females	1.2308 0.5374 1.2398	3 SH4	SH	males	0.9112 0.4601 1.2094	10 SW36	GH	females	1.2308 0.5374 1.2398							
11 SW38	SW	females	0.574 0.4249	4 SH4	SH	males	0.6862 0.6008 1.0913	11 SW38	GH	females	0.574 0.4249							
12 SW40	SW	females	1.4009 0.4642 0.5291	5 SH4	SH	males	0.6862 0.6008 1.0913	12 SW40	GH	females	1.4009 0.4642 0.5291							
13 SW42	SW	females	1.2308 0.5374 1.2398	6 SH4	SH	males	0.6862 0.6008 1.0913	13 SW42	GH	females	1.2308 0.5374 1.2398							
14 SW44	SW	females	0.5211 0.539 0.3778	7 SH4	SH	males	0.19 0.3898 0.4669	14 SW44	GH	females	0.5211 0.539 0.3778							
15 SW46	SW	females	1.804 0.4723 0.2518	8 SH4	SH	males	0.9112 0.4601 1.2094	15 SW46	GH	females	1.804 0.4723 0.2518							
16 SW48	SW	females	1.1124 0.5921 0.6906	9 SH4	SH	males	0.6862 0.6008 1.0913	16 SW48	GH	females	1.1124 0.5921 0.6906							
9 SW50	SW	females	0.5211 0.539 0.3778	10 SH5	SH	males	0.19 0.3898 0.4669	9 SW50	GH	females	0.5211 0.539 0.3778							
10 SW52	SW	females	1.2308 0.5374 1.2398	11 SH5	SH	males	0.9112 0.4601 1.2094	10 SW52	GH	females	1.2308 0.5374 1.2398							
11 SW54	SW	females	0.574 0.4249	12 SH5	SH	males	0.6862 0.6008 1.0913	11 SW54	GH	females	0.574 0.4249							
12 SW56	SW	females	1.4009 0.4642 0.5291	13 SH5	SH	males	0.6862 0.6008 1.0913	12 SW56	GH	females	1.4009 0.4642 0.5291							
1																		

Fig4D IL6 in WT KO mem fraction

pairs	ID	Region	Housing	Geno	Frxn	nd Actin	IL6/ Actin	no wt out
2	2.7240000000000	GH WT M	GH	WT	M	0.86922	0.8484	0.8484
2	2.7210000000000	GH KO M	GH	KO	M	1.08054	0.62353	0.62353
3	2.3540000000000	SH KO M	SH	KO	M	0.45056		
3	2.7460000000000	SH WT M	SH	WT	M	0.54625	1.71205	1.71205
4	2.7500000000000	GH WT M	GH	WT	M	0.42663	1.58709	1.58709
4	2.7490000000000	GH KO M	GH	KO	M	0.48644	0.86136	0.86136
5	2735*	SH WT M	SH	WT	M	1.2799	0.43213	0.43213
5	2729*	SH KO M	SH	KO	M	1.25598	0.35229	0.35229
6	2744*	SH WT M	SH	WT	M	1.66667	0.42034	0.42034
6	2747*	SH KO M	SH	KO	M	0.88517	0.60969	0.60969
7	2.7790000000000	SH WT M	SH	WT	M	0.68239	1.54259	1.54259
7	2.7250000000000	GH KO M	GH	KO	M	1.76074	1.00368	1.00368
8	2.6920000000000	SH KO M	SH	KO	M	0.70767	0.62974	0.62974
8	2.7630000000000	SH WT M	SH	WT	M	1.01516	0.63578	0.63578
9	2.7780000000000	GH WT M	GH	WT	M	2.17776	0.81854	0.81854
9	2.7810000000000	GH KO M	GH	KO	M	1.47852	0.54567	0.54567
10	2.6930000000000	SH KO M	SH	KO	M	1.60067	0.56643	0.56643
10	2.7590000000000	SH WT M	SH	WT	M	0.45072	1.09104	1.09104
11	2.7390000000000	GH WT M	GH	WT	M	0.67397	0.91204	0.91204
11	2.7380000000000	GH KO M	GH	KO	M	0.82561	1.4146	1.4146

Fig4E Cyto IL6 in WT KO

Fig4H 4I microglia

pairs	id	geno	#MG	Area	Int dens	VAR7	VAR8	VAR9	VAR10	VAR11
1	B11 S19 B2 KRM wt		61	0.00159	0.05641					
2	B11 S19 B3 KRM ko		53	0.00168	0.0597					
2	B11 S19 B4 KRM wt		36	0.00154	0.04623					
3	B12 s18 B 1 KRM ko		49	0.00283	0.05492					
4	B12 s18 b2 KRM wt		32	0.0019	0.04975					
3	B12 s 20 B3 KRM wt		35	0.00216	0.04965					
4	B12 s 20 B 4 KR ko		67	0.00225	0.07741					
						B13 s 20 B1 KRM ko				
6	B13 s20 B2 KRM wt		43	0.00246	0.05213			33	0.0028	0.06637
6	B13 s 20 B3 KRM ko		82	0.00218	0.06533					
1	B11 S19 b1 KRM ko		71	0.00195	0.06038					

Fig4K and 4L Astrocytes

Section	Block	ID #	Genotype	Age	Sex	strocytes	Avg. ROD	ROD - BG	cell body processes	
070618 C3C6-1 GFAP B4	1	1577	WT	Young	Male	52	6.8255	6.7827	0.043	3.6
070618 C3C6-3 GFAP B6	3	1446	WT	Young	Male	20	5.4788	5.4708	0.0358	3.2
070618 C3C6-6 GFAP B3	6	1148	WT	Young	Male	18	6.0349	6.0309	0.0397	3.5
070618 C3C6-9 GFAP B2	9	1453	WT	Young	Male	31	5.1688	5.1658	0.0343	4.1
070618 C3C6-2 GFAP B5	2	1544	WT	Young	Female	35	4.0567	4.0317	0.0254	3.1
070618 C3C6-4 GFAP B1	4	1387	WT	Young	Female	15	4.3057	4.2947	0.0258	3.1
070618 C3C6-5 GFAP B5	5	1385	WT	Young	Female	20	4.1159	4.1129	0.0298	2.6
070618 C3C6-7 GFAP B1	7	1553	WT	Young	Female	24	4.7331	4.6901	0.0321	3.9
070618 C3C6-8 GFAP B4	8	1322	WT	Young	Female	35	3.1023	3.0823	0.0232	3.8
070618 C3C6-1 GFAP B6	1	1550	KO	Young	Male	44	4.3837	4.3664	0.0306	4.1
070618 C3C6-3 GFAP B5	3	1445	KO	Young	Male	22	4.7238	4.7198	0.0291	3.2
070618 C3C6-6 GFAP B1	6	1326	KO	Young	Male	17	5.9613	5.9483	0.0402	3.5
070618 C3C6-9 GFAP B6	9	1444	KO	Young	Male	41	3.0808	3.0658	0.0241	3
070618 C3C6-2 GFAP B4	2	1548	KO	Young	Female	34	5.6708	5.6617	0.0365	2.9
070618 C3C6-4 GFAP B3	4	1392	KO	Young	Female	16	4.1267	4.0697	0.0271	3.4
070618 C3C6-5 GFAP B3	5	1452	KO	Young	Female	22	4.3775	4.3525	0.0296	4
070618 C3C6-7 GFAP B5	7	1556	KO	Young	Female	20	3.6221	3.6191	0.0263	3.8
070618 C3C6-8 GFAP B2	8	1575	KO	Young	Female	26	5.2793	5.2673	0.0342	4
070618 C3C6-1 G	1	1551	HT	Young	Male	32	5.8392	5.7699	0.0363	3.1
070618 C3C6-3 G	3	1443	HT	Young	Male	25	5.1928	5.1868	0.0335	3.4
070618 C3C6-6 G	6	1547	HT	Young	Male	26	4.9073	4.8933	0.034	4.1
070618 C3C6-9 G	9	1450	HT	Young	Male	19	4.2874	4.2674	0.0277	3.5
070618 C3C6-2 G	2	1546	HT	Young	Female	30	5.6689	5.6429	0.0355	4.5
070618 C3C6-4 G	4	1391	HT	Young	Female	28	4.7046	4.6626	0.0271	4.1
070618 C3C6-5 G	5	1447	HT	Young	Female	22	5.4119	5.4029	0.0313	3.8
070618 C3C6-7 G	7	1552	HT	Young	Female	30	4.4466	4.4346	0.0336	4.5
070618 C3C6-8 G	8	1557	HT	Young	Female	52	4.1275	4.1205	0.0295	3.8