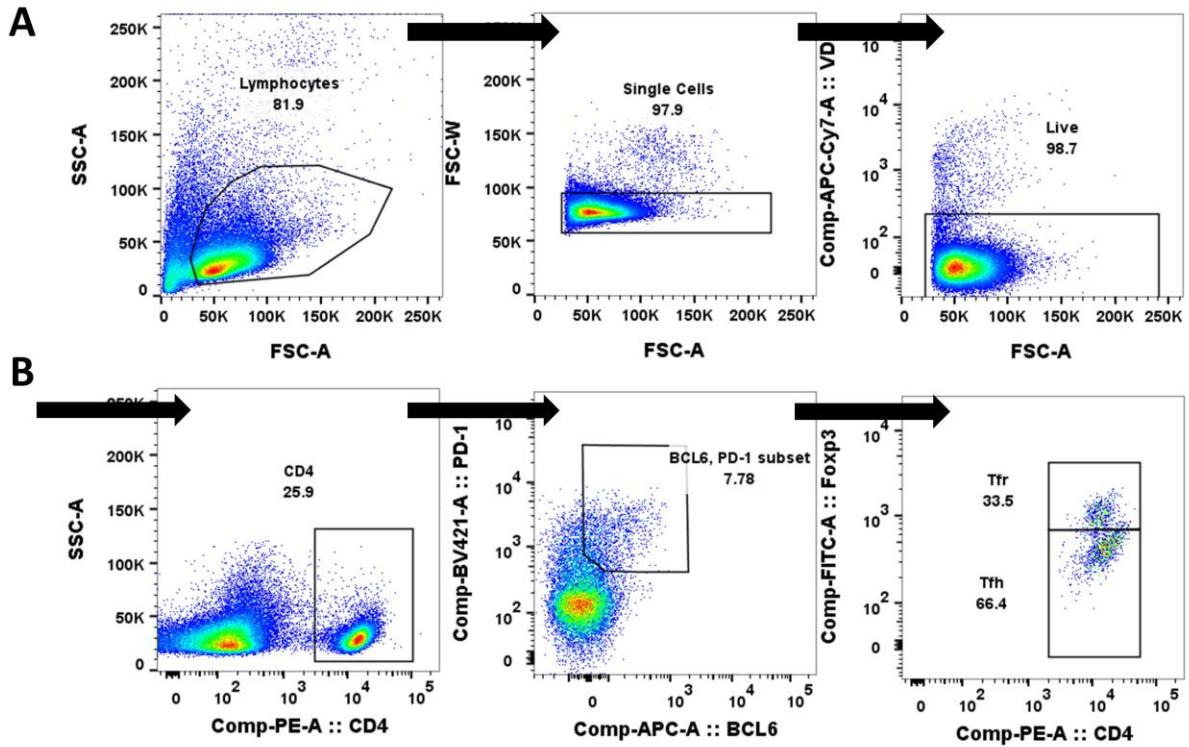


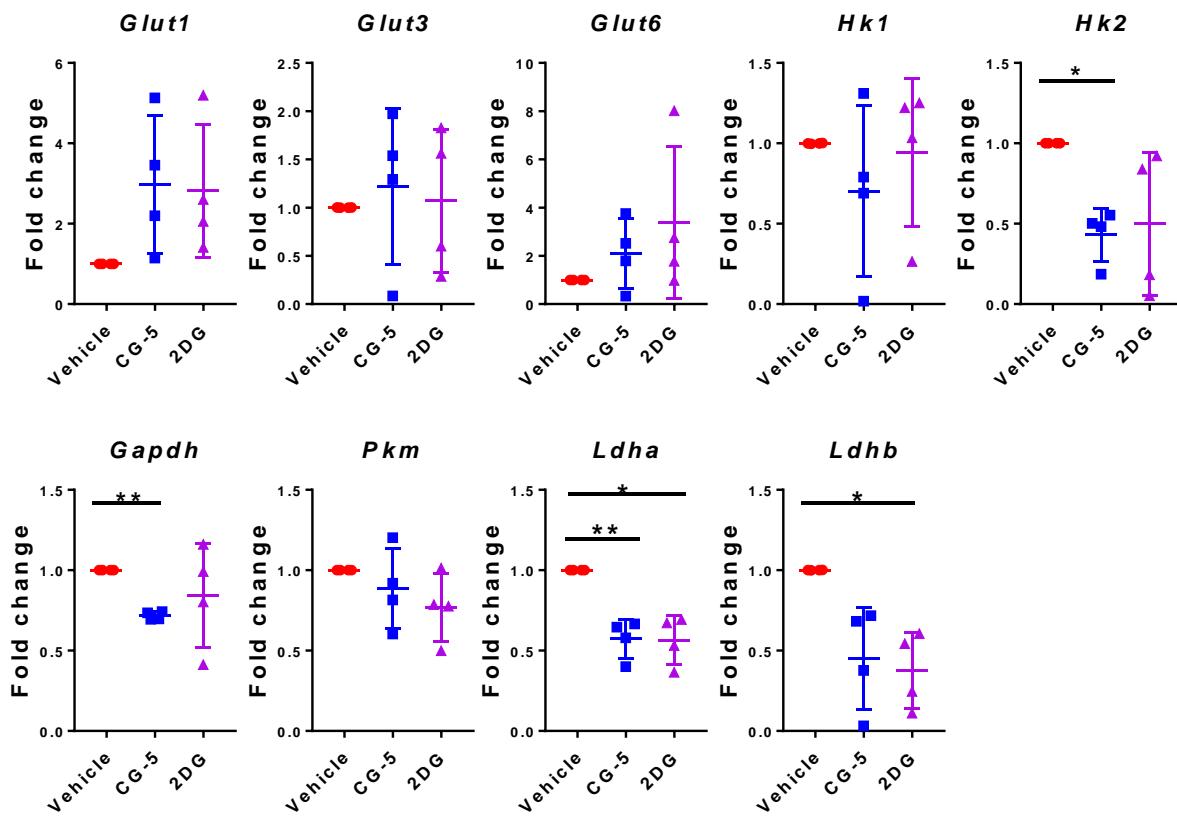
**Supplemental Table 1. Primers used for qRT-PCR.**

<b>Mouse</b>	
<i>Glut1</i>	Forward: 5'-CAGTCGGCTATAACACTGGTG-3'
	Reverse: 5'-GCCCGACAGAGAAGAT G-3'
<i>Glut3</i>	Forward: 5'-GCTTGGCAGACGCACTCT-3'
	Reverse: 5'-TAGTGTGCCAAATGCACCCC-3'
<i>Glut6</i>	Forward: 5'-CTCTACGCCCTGGTCTGC-3'
	Reverse: 5'-ATCATGATGAGAACCGGCC-3'
<i>Ldha</i>	Forward: 5'-CATTGTCAAGTACAGTCCACA CT-3'
	Reverse: 5'-TTCCAATTACTCGGTTTGGGA-3'
<i>Ldhb</i>	Forward: 5'-GATTCCGCTACCTCATGGCA-3'
	Reverse: 5'-ATGCCGTACATTCCCTGTCC-3'
<i>Hk1</i>	Forward: 5'-TTCGAGAAGATGGTGAGCGG-3'
	Reverse: 5'-GGAGAGTCCCCATCCCGTT-3'
<i>Hk2</i>	Forward: 5'-TGATCGCTGCTTATTACGG-3'
	Reverse: 5'-AACCGCCTAGAA ATCTCCAGA-3'
<i>Cpt1-b</i>	Forward: 5'-CGTCCCTGTACCAACGAGTC-3'
	Reverse: 5'-CAGAAAGTACCTCAGCCAGG-3'
<i>Pkm</i>	Forward: 5'-GCCGCCTGGACATTGACTC-3'
	Reverse: 5'-CCATGAGAGAAATTCAAGGCGAG-3'
<i>Gls2</i>	Forward: 5'-AGCGTATCCCTATCCACAAGTTCA-3'
	Reverse: 5'-GACGTCCAGTGGCCTTCAGAG-3'
<i>Cpt1a</i>	Forward: 5'-CCAGGCTACAGTGGGACATT-3'
	Reverse: 5'-GAACTTGCCATGTCCTTGT-3'
<i>G6pdx</i>	Forward: 5'-CACAGTGGACGACATCCG AAA-3'
	Reverse: 5'-AGCTACATAGGA ATTACGGGC AA-3'
<i>Rpe</i>	Forward: 5'-GAAGTGTGGGAGGCAG-3'
	Reverse: 5'-TTTAATCACTGGAATGCAGCAC-3'
<i>Cpt2</i>	Forward: 5'-ACCATGCACTACCAGGACAG-3'
	Reverse: 5'-TATCAAACCAGGGGCCTGAGA-3'
<i>Odc</i>	Forward: 5'-GACGAGTTGACTGCCACATC-3'
	Reverse: 5'-CGCAACATAGAACGCATCCTT-3'
<i>Pgd</i>	Forward: 5'-CGTAAGGCCCTATGCTTC-3'
	Reverse: 5'-TGAAGTTCTGGGTTTCGCTC-3'
<i>Gapdh</i>	Forward: 5'-GAAACTGGGAAGGGGAGTGG-3'
	Reverse: 5'-GCCAAATCCGTTCACACCG-3'
<i>Ppia</i>	Forward: 5'-GCTGTTGCAGACAAAGTCCA-3'
	Reverse: 5'-CGTGTAAAGTCACCACCCCTGG-3'

<b>Human</b>	
<i>GLUT1</i>	Forward: 5'-TTGGCTCCGGTATCGTCAAC-3'
	Reverse: 5'-CTCCACCACAAACAGCGACA-3'
<i>GLUT3</i>	Forward: 5'-GTCATGATCCCAGCGAGACC-3'
	Reverse: 5'-CTGGGGTGACCTCTGTGTC-3'
<i>GLUT6</i>	Forward: 5'-CCATGCTCTCATGGCTAC-3'
	Reverse: 5'-CACTGGCAGGAAGGACTTGG-3'
<i>LDHA</i>	Forward: 5'-TGGAGATTCCAGTGTGCCTG-3'
	Reverse: 5'-CCTGCTTGTGAACCTCTTCC-3'
<i>LDHB</i>	Forward: 5'-GGAGAGTCGGCTCAATCTGG-3'
	Reverse: 5'-AGAACATGCCACTGGGTTGGA-3'
<i>HK1</i>	Forward: 5'-TAAAGCGAGCGGAGTGGAAG-3'
	Reverse: 5'-ACAGTGCTGGTCGTCAAGC-3'
<i>HK2</i>	Forward: 5'-ATTGCCGAATGCCTGGCTAA-3'
	Reverse: 5'-CAAAGTCCCCCTCCCTCTGGA-3'
<i>PKM</i>	Forward: 5'-ATCTGCACAACCTGTGACCG-3'
	Reverse: 5'-ATAAACACCCGACGCTTGGT-3'
<i>GAPDH</i>	Forward: 5'-GCAAATTCCATGGCACCGTC-3'
	Reverse: 5'-AAATGAGCCCCAGCCTTCTC-3'
<i>PPIA</i>	Forward: 5'-AGCTGTTACCCCTGATCGTG-3'
	Reverse: 5'-CCTGTCTGCAAACAGAAGGC-3'

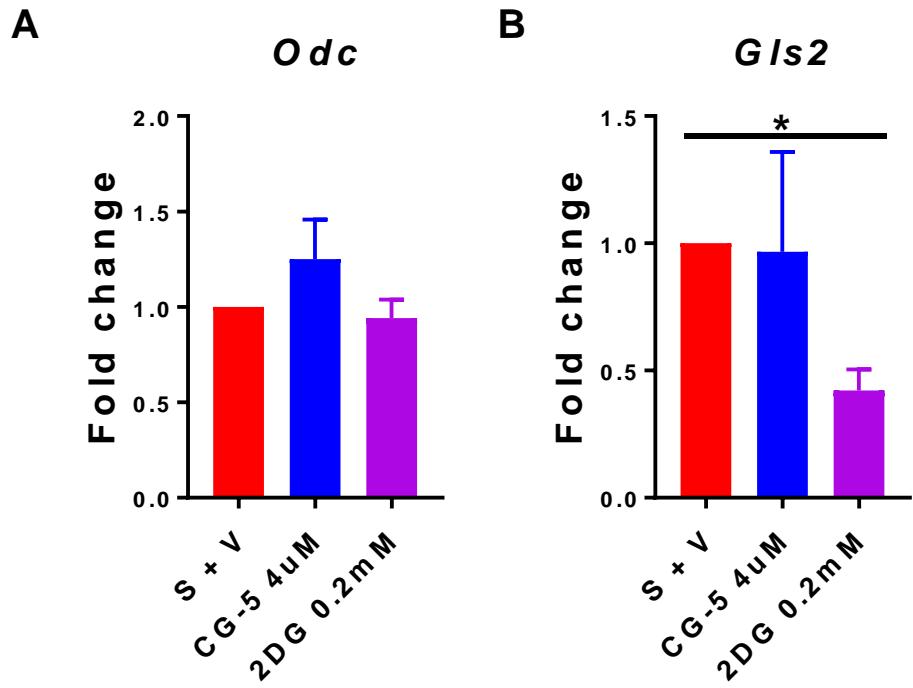


**Sup Fig. 1. Gating strategy.** **(A)** Live lymphocytes gating. Lymphocytes were gated based on side-scatter area (SSC-A) and forward scatter area (FSC-A), followed with single cells gating by FSC-W and FSC-A. Then live cells were identified by viability dye (VD) exclusion. **(B)** Gating for Tfh (follicular T helper) and Tfr (follicular regulatory T) cells. Among the live cells gated in **(A)**, the CD4<sup>+</sup> T cells were gated, following with BCL6<sup>+</sup> PD-1<sup>+</sup> follicular cells, among which the Foxp3<sup>-</sup> cells are identified as Tfh and Foxp3<sup>+</sup> as Tfr cells.



**Sup. Fig. 2. Glycolytic gene expression in CG-5 treated CD4<sup>+</sup> T cells.**

CD4<sup>+</sup> T cells from B6 mice were stimulated with anti-CD3/CD28 for 24 h with or without 4 uM CG-5 or 0.2 mM 2DG. The relative expression of glycolytic genes was normalized to the vehicle-treated values in every single mouse. Results expressed as means ± S.E.M from n = 4 per group compared with the vehicle-treated group using one-way ANOVA. \*: p<0.05, \*\*: p < 0.01.



**Sup Fig. 3. Glutaminolysis gene expression in CG-5 treated CD4<sup>+</sup> T cells.** CD4<sup>+</sup> T cells from B6 mice were stimulated with anti-CD3/CD28 for 24 h with or without 4 uM CG-5 or 0.2 mM 2DG. The relative expression of *Odc* and *Gls2* was normalized to the vehicle-treated values in every single mouse. Results expressed as mean ± S.E.M from n = 4 per group compared with the S + V group using one-way ANOVA. \*\*: p < 0.01.