

1 **Table S9** | Kyoto Encyclopaedia of Genes and Genomes pathway analysis for red junglefowl and domestic chicken populations using KOBAS
2 version 3.0¹.

3 **A. Red Junglefowl population**

ID	Description	P value	Genes
gga04914	Progesterone-mediated oocyte maturation	0.033069783	<i>RPS6KA1, ADCY1, CDC23</i>
gga00230	Purine metabolism	0.039356647	<i>ADCY1, ENTPD4, GUCY1A3, NT5C1A</i>
gga04270	Vascular smooth muscle contraction	0.049550781	<i>KCNMA1, GUCY1A3, ADCY1</i>

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5 **B. Ethiopian domestic chicken population**

ID	Description	P value	Genes
gga04080	Neuroactive ligand-receptor interaction	0.004583	<i>AGTR1, TACR3, HRH1, TSHR</i>
gga04020	Calcium signaling pathway	0.008034	<i>AGTR1, TACR3, HRH1</i>
gga04261	Adrenergic signaling in cardiomyocytes	0.041098	<i>AGTR1, ATP1B3</i>

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7 **C. Saudi Arabian domestic chicken population**

ID	Description	P value	Genes
gga04620	Toll-like receptor signaling pathway	0.038572949	<i>TLR7, MAP2K1, MAP3K7</i>
gga04270	Vascular smooth muscle contraction	0.047517517	<i>KCNMA1, PRKG1, MAP2K1</i>

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9 **D. Sri Lankan domestic chicken population**

ID	Description	P value	Genes
gga04261	Adrenergic signaling in cardiomyocytes	0.02710155	<i>ATP2B4, MAPK13, PPP2R2A</i>
gga04020	Calcium signaling pathway	0.049582166	<i>ATP2B4, TACR3, EGFR</i>

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¹ <http://kobas.cbi.pku.edu.cn/>