

Table S3: PANTHER categories over-represented among genes predicted to be under positive selection.

Category	Description	Gene number			Fold Enrich.	P-value MWU	P-value FET
		All	PSGs	E[PSGs]			
	Biological process						
BP00148	Immunity and defense	968	76	23.4	3.2	2.2×10^{-25}	3.0×10^{-20}
BP00184	Olfaction	122	8	3.0	2.7	8.6×10^{-15}	9.6×10^{-03}
BP00183	Chemosensory perception	128	8	3.1	2.6	1.3×10^{-13}	1.3×10^{-02}
BP00155	Macrophage-mediated immunity	97	10	2.3	4.3	4.6×10^{-09}	1.2×10^{-04}
BP00149	T-cell mediated immunity	134	15	3.2	4.6	1.2×10^{-08}	8.7×10^{-07}
BP00157	Natural killer cell mediated immunity	35	7	0.8	8.3	1.6×10^{-08}	1.7×10^{-05}
BP00107	Cytokine and chemokine mediated signaling pathway	192	10	4.6	2.2	4.1×10^{-08}	1.9×10^{-02}
BP00255	Cytokine/chemokine mediated immunity	88	7	2.1	3.3	7.6×10^{-08}	5.5×10^{-03}
BP00176	Blood clotting	69	4	1.7	2.4	2.2×10^{-07}	8.6×10^{-02}
BP00152	B-cell- and antibody-mediated immunity	73	16	1.8	9.1	4.8×10^{-07}	1.5×10^{-11}
BP00156	Interferon-mediated immunity	56	7	1.4	5.2	8.0×10^{-07}	3.8×10^{-04}
BP00153	Complement-mediated immunity	40	7	1.0	7.2	6.0×10^{-06}	4.3×10^{-05}
BP00150	MHCI-mediated immunity	12	2	0.3	6.9	1.6×10^{-05}	3.3×10^{-02}
BP00151	MHCII-mediated immunity	12	3	0.3	10.3	3.4×10^{-05}	2.6×10^{-03}
BP00288	Granulocyte-mediated immunity	47	7	1.1	6.2	3.4×10^{-05}	1.3×10^{-04}
BP00240	Fertilization	26	4	0.6	6.4	6.2×10^{-05}	3.3×10^{-03}
BP00299	Steroid hormone metabolism	21	3	0.5	5.9	8.3×10^{-05}	1.4×10^{-02}
	Molecular function						
MF00173	Defense/immunity protein	223	46	5.4	8.5	1.4×10^{-35}	9.7×10^{-30}
MF00004	Immunoglobulin receptor family member	66	27	1.6	16.9	4.4×10^{-19}	1.0×10^{-26}
MF00224	KRAB box transcription factor	409	9	9.9	0.9	4.2×10^{-13}	6.6×10^{-01}
MF00018	Chemokine	29	4	0.7	5.7	2.0×10^{-08}	5.0×10^{-03}
MF00102	Protease inhibitor	97	3	2.3	1.3	1.1×10^{-07}	4.2×10^{-01}
MF00216	Serine protease	140	10	3.4	3.0	1.6×10^{-06}	2.2×10^{-03}
MF00250	Serine protease inhibitor	63	2	1.5	1.3	7.5×10^{-06}	4.5×10^{-01}
MF00175	Major histocompatibility complex antigen	15	4	0.4	11.0	1.1×10^{-05}	3.7×10^{-04}
MF00177	Other defense and immunity protein	50	4	1.2	3.3	1.7×10^{-05}	3.2×10^{-02}
MF00174	Complement component	35	6	0.8	7.1	3.6×10^{-05}	1.7×10^{-04}
MF00176	Antibacterial response protein	26	1	0.6	1.6	5.8×10^{-05}	4.7×10^{-01}

Bold indicates FWER < 0.05 (Holm correction).