

S9 Table

	<b>Term</b>	<b># Genes</b>	<b>% Genes</b>	<b>Adjusted p-value</b>
<b>ApA (530 genes)</b>	1. Detection of chemical stimulus involved in sensory perception of smell	97	18.3	$1.4 \times 10^{-61}$
	2. Olfactory receptor	97	18.3	$1.1 \times 10^{-61}$
	3. Olfactory receptor activity	97	18.3	$3.5 \times 10^{-61}$
	4. Olfaction	97	18.3	$7.1 \times 10^{-61}$
	5. Olfactory transduction	97	18.3	$3.4 \times 10^{-53}$
	6. Sensory transduction	103	19.4	$5.8 \times 10^{-52}$
	7. G-protein coupled receptor activity	108	20.4	$1.6 \times 10^{-49}$
	8. GPCR, rhodopsin-like, 7TM	105	19.8	$1.5 \times 10^{-46}$
	9. G-protein coupled receptor	112	21.1	$1.5 \times 10^{-46}$
	10. G-protein coupled receptor, rhodopsin-like	103	19.4	$6.2 \times 10^{-46}$
	11. Transducer	113	21.3	$2.4 \times 10^{-44}$
	12. G-protein coupled receptor signaling pathway	112	21.1	$7.4 \times 10^{-42}$
	13. Receptor	132	24.9	$4.6 \times 10^{-29}$
	14. Topological domain: extracellular	161	30.4	$9.4 \times 10^{-20}$
	15. Disulfide bond	162	30.6	$2.8 \times 10^{-18}$
	16. Topological domain: cytoplasmic	179	33.8	$1.3 \times 10^{-17}$
	17. Glycosylation site: N-linked	202	38.1	$3.9 \times 10^{-16}$
	18. Odorant binding	26	4.9	$3.3 \times 10^{-16}$
	19. Disulfide bond	173	32.6	$2.8 \times 10^{-16}$
	20. Glycoprotein	209	39.4	$1.1 \times 10^{-14}$
	21. Cell membrane	156	29.4	$3.5 \times 10^{-13}$
	22. Detection of chemical stimulus involved in sensory perception	22	4.2	$1.2 \times 10^{-11}$
	23. Plasma membrane	184	34.7	$2.7 \times 10^{-11}$
	24. Sensory perception of smell	24	4.5	$1.4 \times 10^{-9}$
	25. Transmembrane region	202	38.1	$1.0 \times 10^{-8}$
	26. Transmembrane helix	216	40.8	$1.8 \times 10^{-8}$
	27. Integral component of membrane	199	37.5	$9.1 \times 10^{-8}$
	28. Transmembrane	216	40.8	$2.2 \times 10^{-8}$
	29. Transmembrane signaling receptor activity	22	4.2	$6.1 \times 10^{-5}$
	30. Membrane	255	48.1	$4.3 \times 10^{-5}$
<b>ApC (392 genes)</b>	1. Extracellular space	45	11.5	$3.6 \times 10^{-1}$
	2. Biosynthesis of antibiotics	12	3.1	$2.8 \times 10^{-1}$
<b>ApG (1,011 genes)</b>	1. Domain: Leucine-zipper	17	1.7	$5.7 \times 10^{-1}$
	2. DNA-binding region: basic motif	20	2.0	$9.5 \times 10^{-1}$
<b>ApT (223 genes)</b>	1. Commissural neuron axon guidance	3	1.3	$9.8 \times 10^{-1}$
	2. Disulfide bond	55	24.7	$7.6 \times 10^{-1}$