Supplementary Table S5 Gene Ontology terms generated by PANTHER analysis

GO molecular function complete	Bos taurus (REF)	Goat (observed)	expected	Fold Enrichment	+/-	P value
G-protein coupled receptor activity	1361	31	89.37	0.35	-	5.34E-10
transmembrane signaling receptor activity	1675	54	109.99	0.49	-	1.62E-06
transmembrane receptor activity	1711	55	112.35	0.49	-	9.18E-07
receptor activity	1935	65	127.06	0.51	-	4.48E-07
molecular transducer activity	1970	66	129.36	0.51	-	2.63E-07
signaling receptor activity	1757	60	115.37	0.52	-	6.94E-06
signal transducer activity	1988	84	130.54	0.64	-	8.37E-03
binding	10951	800	719.09	1.11	+	9.59E-03
GO biological process complete						
chordate embryonic development	503	62	33.03	1.88	+	2.29E-02
embryo development ending in birth or egg hatching	508	62	33.36	1.86	+	3.09E-02
multicellular organism development	3337	286	219.12	1.31	+	7.57E-03
anatomical structure development	3667	320	240.79	1.33	+	2.26E-04
developmental process	3920	337	257.4	1.31	+	3.83E-04
system development	2985	263	196.01	1.34	+	2.72E-03
negative regulation of cellular process	3458	290	227.07	1.28	+	3.65E-02
cellular macromolecule metabolic process	4888	393	320.97	1.22	+	2.55E-02
cellular metabolic process	6535	510	429.12	1.19	+	1.14E-02
nitrogen compound metabolic process	6159	479	404.43	1.18	+	4.69E-02
primary metabolic process	6671	515	438.05	1.18	+	3.64E-02
G-protein coupled receptor signaling pathway	1603	47	105.26	0.45	-	2.65E-07
sensory perception	1309	18	85.95	0.21	-	6.87E-16
nervous system process	1548	39	101.65	0.38	-	1.55E-09
system process	1917	70	125.88	0.56	-	7.59E-05
detection of stimulus	1099	8	72.17	< 0.2	-	1.32E-18
GO cellular component complete						
macromolecular complex	4472	356	293.65	1.21	+	3.65E-02
cytoplasmic part	6582	511	432.2	1.18	+	3.43E-03
intracellular part	11457	870	752.32	1.16	+	2.57E-08
intracellular	11972	909	786.13	1.16	+	1.82E-09
cell part	14404	1022	945.83	1.08	+	1.34E-03
cell	14447	1024	948.65	1.08	+	1.64E-03
cytoplasm	8511	645	558.87	1.15	+	1.22E-03
intracellular membrane-bounded organelle	8380	650	550.27	1.18	+	2.17E-05
intracellular organelle	9885	746	649.09	1.15	+	6.31E-05
organelle	10842	831	711.93	1.17	+	2.44E-08
membrane-bounded organelle	9844	765	646.4	1.18	+	4.31E-08
intracellular organelle part	6466	498	424.59	1.17	+	1.31E-02
organelle part	6638	514	435.88	1.18	+	4.29E-03