

Table S1 A. Inventory of nGPCR genes in human, rat, mouse, chicken, *T. nigroviridis*, and *T. rubripes*.

Class	Human	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
A1	20	17	19	21	43	44
A2	53	63	62	52	84	81
A3	26	26	26	19	30	30
A4	49	40	44	40	46	46
A5	49	47	48	48	63	72
A6	8	8	8	8	10	10
A7	69	67	71	51	70	68
A8	10	20	31	4	0	0
Subtotal	284	288	309	243	346	351
B	48	44	46	42	53	50
C	16	16	16	14	19	23
F	11	11	11	11	13	14
Subtotal	75	71	73	67	85	87
Total	359	359	382	310	431	438

Table S1 B. List of nGPCR gene inventory in human, rat, mouse, chicken, *T. nigroviridis*, and *T. rubripes*.

**Class A
Subclass A1**

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
GPR26	2849	NP_620196	NP_775586	XP_421809	CAG00716 CAG03282	FRUP00000148603 FRUP00000160817
GPR50	9248	XP_346375	NP_034470	NP_990692	CAF99125	FRUP00000153084
GPR61	83873	XP_227581	NP_780679	NW_060850	CAG06826 CAG07504	
GPR62	118442	XP_576464	XP_488192		CAG06806 CAG06960	FRUP00000149305
GPR78	27201			XP_426354	GSTENT00035915001 CAG05074	FRUP00000132645 FRUP00000158903
GPR84	53831	GeneID_367000	NP_109645		CAG06758	FRUP00000162610
GPR101	83550	XP_229186	XP_141764		CAG09823 SCAF13862	FRUP00000144472
GPR135	64582	NP_861436	NP_861417	XP_426475	CAF98168	FRUP00000151143
MTNR1A	4543	XP_341442	NP_032665	NP_990693	CAF96594 CAG04524	FRUP00000158716 FRUP00000160445
MTNR1B	4544	XP_345900	NP_663758	XP_417201	SCAF14601	FRUP00000141583
OPN1LW	5956		GeneID_20164	NP_990771 NP_990740	CAF96877	FRUP00000164823
OPN1MW-fish					CAG06878 CAG08706 CAG10163	FRUP00000141947 FRUP00000144085 FRUP00000151874
OPN1MW	2652	NP_446000	NP_032132			
OPN1SW	611	NP_112277	NP_031564		CAF96876	FRUP00000164822
OPN3	23596		NP_034228	XP_426139 XP_425584	CAF89728 CAF97626 CAG08854 CAG09827	FRUP00000131360 FRUP00000140941 FRUP00000143705 FRUP00000155686
OPN4	94233	NP_620215	NP_038915	XP_421494 NP_989956	CAF90276 CAF96662 CAF99228 CAG08413	FRUP00000141781 FRUP00000141782 FRUP00000145811 FRUP00000145812 FRUP00000149714 FRUP00000163792
OPN5/GPR136	221391	NP_861437	NP_861418	XP_426228 XP_420056 XP_419178	CAF91597 CAG09534 CAG03922 CAG11258 CAG13006 CAG00077	FRUP00000133622 FRUP00000139290 FRUP00000145353 FRUP00000149081 FRUP00000154669 FRUP00000162507 FRUP00000164504 FRUP00000165286
RE2/GPR161	23432	XP_222837	XP_136361	XP_416594	CAG05829 CAG09451	FRUP00000138055 FRUP00000148240
RGR	5995	XP_224673	NP_067315	XP_421504	CAF98663 CAG13313	FRUP00000142438 FRUP00000148015
RHO	6010	NP_254276	NP_663358	XP_414454 NP_990821	CAG06941 CAG11315 CAG11334	FRUP00000136321 FRUP00000136323 FRUP00000156773 scaffold_200
RRH	10692	XP_227718	NP_033128	XP_420649	CAF94915	FRUP00000130657
Subtotal	20	17	19	21	43	44

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
Subclass A2						
ADORA1	134	NP_058851	NP_001008533	NP_989647	CAF96797 CAG11815 CAG07486	FRUP00000128561 FRUP00000143490
ADORA2A	135	NP_445746	NP_033760	XP_425280	CAF93754 CAG02468	FRUP00000141222 FRUP00000142941 FRUP00000144716
ADORA2B	136	NP_058857	NP_031439	NP_990418	CAF98510 CAG09178	FRUP00000154463
ADORA3	140	NP_037028	NP_033761	NP_989482	CAG11816	FRUP00000149785
ADRA1A	148	NP_058887	NP_038489	XP_425762	CAG11192	FRUP00000141240
ADRA1B	147	NP_058687	NP_031442	XP_414483	CAF92745 CAF97256	FRUP00000152462 FRUP00000164690
ADRA1D	146	NP_077809	NP_038488	XP_420871	CAF91280	FRUP00000140656
ADRA2A	150	NP_036871	NP_031443	XP_426537	CAG01293 CAG05052 CAG05356	FRUP00000127209 FRUP00000145339 FRUP00000154128
ADRA2B	151	NP_612514	NP_033763		CAG07800	FRUP00000129228
ADRA2C	152	NP_612515	NP_031444	XP_426355 XP_425203	CAG00720 CAG03287	FRUP00000136842 FRUP00000158905
ADRA2D-fish					CAF91577	CAC87886 CAC87887
ADRB1	153	NP_036833	NP_031445	XP_426540	CAG08867 CAG12607	FRUP00000128218 FRUP00000147601
ADRB2	154	NP_036624	NP_031446	XP_425195	CAG10129	FRUP00000128843 FRUP00000157526
ADRB3	155	NP_037240	NP_038490	XP_428541		
CHRM1	1128	NP_542951	NP_031724		CAG10670	FRUP00000131048
CHRM2	1129	NP_112278	NP_987076	XP_416359	CAG02408 CAG03403	FRUP00000127975 FRUP00000129486
CHRM3	1131	NP_036659	NP_150372	NP_990730	CAF92462 CAG10073	FRUP00000160548 scaffold_143
CHRM4	1132	XP_345404	NP_031725	XP_421119	CAG05625 CAG06610	FRUP00000147533 FRUP00000155473
CHRM5	1133	NP_059058	NP_991352	XP_426437	CAG03529	FRUP00000130167
DRD1	1812	NP_037269	NP_031610	XP_425206	CAF93510 CAF95884 CAG11724	FRUP00000154522 FRUP00000164051 FRUP00000164859
DRD2	1813	NP_036679	NP_034207	XP_425811	CAF92229 CAF97490 CAG13001	FRUP00000129665 FRUP00000143523 FRUP00000153968
DRD3	1814	NP_058836	NP_031903	XP_416570	CAG04235	scaffold_146
DRD4	1815	NP_037076	NP_031904	XP_420947	CAF95731 CAF98376	FRUP00000142755 FRUP00000149812
DRD5	1816	NP_036900	NP_038531	XP_426518 XP_426351	CAF90994 CAG02007	FRUP00000131890 FRUP00000138676
GPR21	2844	XP_231251	NP_796357	XP_415391	CAF93159 CAG09652	FRUP00000163990

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
GPR22	2845	XP_234041	NP_780400	XP_001231969	CAF89181 CAF96769 CAG02014 CAG08711	FRUP00000133859 FRUP00000162183 FRUP00000163060 scaffold_374
GPR52	9293	NW_047398	XP_890263	NP_001012941	CAG00742	FRUP00000163527
GPR57g/GPR57/ TAAR3	9288	NP_001009532	NP_001008429			
GPR58/TAAR2	9287	NP_001008512	NP_001007267	XP_427716	CAF94065	FRUP00000131967
GPR75	10936	XP_573685	NP_780699	XP_426099	SCAF15006	scaffold_905
GPR88	54112	NP_113884	NP_071872	XP_001232659		
GPR119	139760	NP_861435	NP_861416	XP_426720 XP_426248	CAF97243	FRUP00000143792
GPR160	26996	NP_001020318	XP_130823	XP_422799		
HRH1	3269	NP_058714	NP_032311	XP_425153	CAG07054	FRUP00000164084
HRH2	3274	NP_037097	NP_001010973	XP_425208	CAG01551 CAG04750	FRUP00000131597 FRUP00000138905
HRH3	11255	NP_445958	NP_598610	XP_425705 XP_425117		FRUP00000146131 FRUP00000165198
HRH4	59340	NP_571984	NP_694727	XP_426079 XP_414481	CAG07613 CAG10949	
HTR1A	3350	NP_036717	NP_032334	XP_429136	CAF91711 CAF93441	FRUP00000136865 FRUP00000154633
HTR1B	3351	NP_071561	NP_034612	XP_419875	CAF89927	FRUP00000161510
HTR1D	3352	NP_036984	NP_032335	XP_001232312	CAG10464	FRUP00000127520
HTR1E	3354			XP_001235179		
HTR1F	3355	NP_068629	NP_032336	XP_425535	CAG09227	FRUP00000155421
HTR2A	3356	NP_058950	NP_766400	XP_425628		
HTR2B	3357	NP_058946	NP_032337	AAF20211	CAC85912 CAC86247	FRUP00000147089
HTR2C	3358	NP_036897	NP_032338	XP_426265	CAG12257	FRUP00000135888
HTR4	3360	NP_036985	NP_032339		CAF93600 CAF95370 CAG04907	FRUP00000138443 FRUP00000140658 FRUP00000164424
HTR5A	3361	NP_037280	NP_032340	XP_426604 XP_425970	CAG04298	scaffold_934
HTR5B		XP_341112	NP_034613			
HTR6	3362	NP_077341	NP_067333	XP_427576	CAG01704	FRUP00000139170 FRUP00000139171
HTR7	3363	NP_075227	NP_032341	XP_421666 XP_420880	CAG05134 CAG09680	FRUP00000139991 FRUP00000144402 FRUP00000144993
PNRe/PNR/TAAR5	9038	NP_001009650	NP_001009574 NP_038736	XP_419740		
TRAR1/Tar1/TAAR1	134864	NP_599155 NP_783173	NP_444435		CAF91012 CAF92549 CAF92550 CAF92551 CAF93538 CAF93617 CAF93618 CAF94841	FRUP00000131749 FRUP00000138381 FRUP00000150777 FRUP00000150779 FRUP00000154655 FRUP00000157293 scaffold_2245

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i> CAF95185 CAF95186 CAF95187 CAF96106 CAG13003	<i>T. rubripes</i>
TRAR3/TAR3	134860	NP_783175 NP_783176 NP_001009975 NP_783181 NP_783180 NP_783178 NP_783177 NP_783192	NP_001010831 NP_001010827 NP_001010829 NP_001010835 NP_001010838 NP_001010839			
TRAR4/TAR4/TAAR6	319100	NP_783174	NP_001010828 NP_001008499			FRUP00000157578 FRUP00000135638
TRAR5/GPR102/TA5/ TAR5/TAAR8	83551	NP_783189 NP_783191 NP_783190	NP_001010830 NP_001010840 NP_001010837			
Subtotal	53	63	62	52	84	81

Subclass A3

CNR1	1268	NP_036916	NP_031752	XP_426191	CAG09211 CAG10478	FRUP00000157187 CAA64174
CNR2	1269	NP_065418	NP_034054	XP_425791	CAF91752	FRUP00000161224
EDG1	1901	NP_058997	NP_031927	XP_422305	CAF90490	scaffold_6096
EDG2	1902	NP_446388	NP_034466	XP_424918	CAF89669 CAF90900 CAF92197	FRUP00000154449 scaffold_86
EDG3	1903	XP_225216	NP_034231	XP_428818	CAG07943 CAG12442	FRUP00000154122 scaffold_270 scaffold_270
EDG4	9170	XP_573887	NP_064412	XP_423763		scaffold_799
EDG5	9294	NP_058888	NP_034463		SCAF15050 chr3_11567980_8876	scaffold_180
EDG6	8698	XP_234930	NP_034232	XP_428050		scaffold_203
EDG7	23566	NP_076459	NP_075359	XP_422368	CAG08072	FRUP00000148649
EDG8	53637	NP_068543	NP_444420		CAF92590	FRUP00000139298
GPR12	2835	NP_110458	NP_001010941	XP_425637	CAG04221 CAG12255	FRUP00000158473
GPR3	2827	NP_714949	NP_032180		CAF88618	FRUP00000160201
GPR6	2830	NP_113994	NP_951013	XP_426182	CAG03572	FRUP00000134973
MC1R/MSHR	4157	EDL92809	NP_032585	XP_425135	AAQ55176	AAO65548
MC2R	4158	XP_574167	NP_032586	XP_426070	CAF95601	
MC3R	4159	NP_001020441	NP_032587	NP_001026186		
MC4R	4160	NP_037231	NP_058673	XP_426042	AAQ55178	AAO65551
MC5R	4161	NP_037314	NP_038624	NP_001026186	AAQ55179	AAO65553
PTGDR	5729	NP_071577	NP_032988			
PTGER1	5731	NP_037232	NP_038669			
PTGER2	5732	NP_112350	NP_032990	XP_426485	CAG00989	scaffold_1339

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
PTGER3	5733	NP_036836	NP_035326	XP_426672	CAG01184	FRUP00000131256
PTGER4	5734	NP_114465	NP_032991	XP_424770	CAF95032 CAF96390 CAF97110 CAG09586	FRUP00000155267 FRUP00000157769 FRUP00000161139 FRUP00000162687
PTGFR	5737	NP_037247	NP_032992	NP_001038122	CAG03303	FRUP00000149163 FRUP00000151130
PTGIR	5739	XP_218457	NP_032993		SCAF14537	FRUP00000130879
TBXA2R	6915	NP_058750	NP_033351		CAG00626	FRUP00000152568
Subtotal	26	26	26	19	30	30

Subclass A4

ADMR	11318	NP_445754	NP_031438		CAF90054	FRUP00000146637
CMKOR1/RDC1	57007	NP_445804	NP_031748	XP_426554	CAG05877	scaffold_387
CYSLTR1	10800	NP_446093	NP_067451	XP_426249	SCAF7335	FRUP00000150747
CYSLTR2	57105	NP_596904	NP_598481	XP_425629		
EBI2	1880		NP_898852	XP_428804	CAG07299 chr2_7825313-7877092	FRUP00000150142 FRUP00000161432
F2R	2149	NP_037082	NP_034299	XP_424799	CAG07882	FRUP00000152221
F2RL1	2150	NP_446349	NP_032000	NP_001012626	CAG05264 CAG05265	FRUP00000130845 FRUP00000130847
F2RL2	2151	NP_445765	NP_034300	XP_414523	CAG05266 CAG07880	FRUP00000151261 FRUP00000129585 FRUP00000130849
F2RL3	9002	NP_446260	NP_032001	XP_418256	CAF95426	chrUn_311834154-530
GPR18	2841		NP_877958	NW_060236	CAG07300	FRUP00000150143
GPR20	2843	NP_071552	NP_775541	XP_425941	CAF99361 CAG11945	FRUP00000136628 FRUP00000165047
GPR23	2846	XP_228501	NP_780480	XP_425741 XP_420150	CAF90112 CAG03809	FRUP00000150750
GPR31	2853	XP_217867	GeneID_107431			
GPR34	2857	NP_001020096	NP_035953	XP_420190	SCAF14978	scaffold_1642
GPR35	2859	NP_001032436	NP_071715	XP_422645		
GPR4	2828	NP_001020851	NP_783599		CAF97465 CAG12733	FRUP00000128368 FRUP00000135821
GPR40	2864	NP_695216	NP_918946			
GPR41	2865	XP_344881	XP_145470		CAF89689	FRUP00000153029
GPR42a/GPR42	2866					
GPR43	2867	NP_001005877	NP_666299	XP_428780 XP_426943	CAF93280 CAG03362	FRUP00000129763 FRUP00000161234
GPR55	9290	AAD22411	NP_001028462			
GPR65	8477	XP_234367	NP_032178	XP_421305	SCAF15019	FRUP00000150188
GPR68	8111	XP_234483	NP_780702	XP_426459	CAF99011	FRUP00000136318
GPR81	27198	XP_001072594	NP_780729			
GPR82	27197		NP_783600	NW_060226		
GPR87	53836	XP_227177	NP_115775	XP_422840		

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
GPR92	57121	XP_575667	XP_355812	XP_416504		
GPR109A/HM74a	338442	NP_852141	NP_109626		CAF90987 CAG05298 CAG08446	FRUP00000136429 FRUP00000146889 FRUP00000148806 FRUP00000150723
GPR109B/HM74	8843					
GPR132/G2A	29933	XP_234574	NP_064309	XP_426469		
GPR141/PGR13	353345	NP_861432	NP_861419	XP_418832	SCAF14544	scaffold_240
GPR17	2840	NW_047510	AAH70439		CAG04290 CAG05650	FRUP00000128875 FRUP00000147658
GPR171/H963	29909		NP_775574	XP_422842		
GPR174/FKSG79	84636	XP_228495	NP_001028423	NP_001008464	CAG14148	scaffold_1393
OXER1/TG1019	165140					
OXGR1/GPR80	27199	NP_997471	NP_001001490	XP_425595 XP_425594	CAG04953	FRUP00000159316
P2RY1	5028	NP_036932	NP_032798	XP_427676 NP_990664	CAF97378 CAG03842	FRUP00000138058
P2RY10	27334	XP_228500	NP_766023	XP_420149 XP_420148		
P2RY11	5032				CAG12186	FRUP00000147765
P2RY12	64805	NP_073637	NP_081847	XP_422839	CAF97387	FRUP00000138083
P2RY13/GPR86	53829	NP_001002853	NP_083084		CAF97388	scaffold_239
P2RY14/GPR105	9934	NP_598261	NP_573463	XP_422841	SCAF14677	
P2RY2	5029	NP_058951	NP_032799	XP_425667	CAG00917 CAF97358	FRUP00000127686 FRUP00000141264 FRUP00000165330
P2RY4	5030	NP_113868	NP_065646	XP_420157	CAG09809	FRUP00000163721
P2RY6	5031	NP_476465	NP_898991	NP_990526	CAG00913	FRUP00000151445
P2RY8	286530			NP_001008679		FRUP00000139369
P2Y5/P2RY5	10161	NW_047454	NP_780325	NP_990530	CAG02919 CAG12785	FRUP00000141960
PTAFR	5724	NP_445773	XP_357441	XP_425768	CAG10424	FRUP00000134471
SUCNR1/GPR91	56670	XP_579061	NP_115776	XP_422836	CAF97381	FRUP00000138067
Subtotal	49	40	44	40	46	46

Subclass A5

AVPR1A	552	NP_444178	NP_058543	XP_425436	CAF96006 CAG12390	FRUP00000141525 FRUP00000161762
AVPR1B	553	NP_058901	NP_036054	XP_425822 XP_425434	CAF96931	scaffold_8423
AVPR2	554	NP_062009	NP_062277		CAG03798 CAG07446	FRUP00000161883 scaffold_323
BRS3	680	NP_690058	NP_033896	NP_989737		
CCKAR	886	NP_036820	NP_033957	XP_420751	CAG04576	FRUP00000133099
CCKBR	887	NP_037297	NP_031653	NP_001001742		
CCK-fish					CAG00996	FRUP00000135669 FRUP00000162216

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i> CAG05857	<i>T. rubripes</i> FRUP00000162217
EDNRA	1909	NP_036682	NP_034462	NP_989450	CAG02202 CAG11066	FRUP00000133802 FRUP00000133804 FRUP00000133807 FRUP00000157593 FRUP00000157598
EDNRB	1910	NP_059029	NP_031930	XP_417001 NP_989451	CAF90114 CAF97649 CAG05905	FRUP00000141004 FRUP00000141006 FRUP00000150746 FRUP00000163212
FSHR	2492	NP_954707	NP_038551	NP_990410	CAF91019	scaffold_49
GNRHR	2798	NP_112300	NP_034453	NP_989984		
GNRHR2	114814			NP_001012627	CAF92557 CAF93245 CAG00826 CAG03087 CAG13098	FRUP00000134302 FRUP00000138360 FRUP00000141711 FRUP00000156324 FRUP00000160897
GPR _e /GPR/GPR176	11245	XP_342494	NP_958755	XP_426435	CAG03525	FRUP00000131045
GPR10	2834	NP_631932	NP_963909	XP_428805 NP_001019756 NP_001012295	CAF97466 CAF99282	FRUP00000135820 FRUP00000165587
GPR19	2842	NP_542146	NP_032183	XP_428465	CAF90680	FRUP00000131864
GPR27	2850	NP_075587	NP_032184			
GPR37	2861	NP_476549	NP_034468	XP_415992	CAG01068	FRUP00000137022 FRUP00000140117 scaffold_2384 scaffold_3299
GPR37L1/ET(B)R-LP-2	9283	XP_573457	NP_602320	XP_419256	SCAF7416	FRUP00000136126 FRUP00000142342
GPR45	11250	XP_237112	NP_444337		CAG05802	FRUP00000163802
GPR63	81491	XP_232847	NP_109658	XP_426189	CAF93484	FRUP00000149653
GPR73/PKR1	10887	NP_620433	NP_067356	XP_419333	CAF98618	FRUP00000139538 FRUP00000154172
GPR73L1/PKR2	128674	NP_620434	NP_659193	XP_419334		
GPR74/NPFF receptor 2	10886	NP_076470	NP_573455	XP_426315	CAF97104 CAG07773	FRUP00000155275 FRUP00000155634
GPR83	10888	NP_536336	NP_034417	XP_426254 XP_425651	CAG06215	FRUP00000164362
GPR85	54329	NP_071590	NP_659503	XP_416019	CAG12125	FRUP00000143116
GPR103/QRFP	84109	NP_937842	NP_780733	XP_420626	CAG04805 SCAF14750	FRUP00000142516
GPR147/NPFFR1	64106	NP_071627	XP_137119	NP_989693	CAG09719	FRUP00000157824
GPR150/PGR11	285601	XP_574811	NP_780704			
GPR154/NPS receptor	387129	XP_235968	NP_783609	XP_426022		
GPR173/SREB3	54328	NP_071591	NP_081819	XP_414427	CAF93024 CAF96921 CAG03946	FRUP00000150812 FRUP00000153190 FRUP00000155856
GRPR	2925	NP_036838	NP_032203	NP_989738	CAF99824 CAG05835	FRUP00000156510 FRUP00000161978
HCRTR1	3061	NP_037196	NP_945197			
HCRTR2	3062	NP_037206	NP_945200	NP_001019755	CAG09420	FRUP00000163192

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
LGR4	55366	NP_775450	XP_355385	XP_426162	CAF99699	scaffold_826
LGR5	8549	XP_235149	NP_034325	XP_425441	CAG14806	FRUP00000149831
LGR6	59352	XP_573455	XP_283647	XP_419253	CAG07358	FRUP00000148236 FRUP00000148237
LGR7	59350	NP_958820	NP_997617	XP_426253	CAG04641	scaffold_1619
LGR8	122042	XP_344074	NP_569720		CAG00416	FRUP00000159568
LHCGR	3973	NP_037110	NP_038610	NP_990267	CAF91017 CAG09466	
NMBR	4829	NP_036931	NP_032729	XP_426167	CAF94959 CAG14163	FRUP00000150118 GSTENT00011415001
NPY1R	4886	NP_001013050	NP_035064	XP_426285		
NPY2R	4887	NP_076458	NP_032757	XP_420373 XP_414599	CAF96589 SCAF14573	FRUP00000138240 DAA05226
NPY5R	4889	NP_037001	NP_057917	XP_420388	CAG02528 CAG05410	FRUP00000160782 FRUP00000160783
NPY6R/NPY1RL/PP2/ Y2B	4888		NP_035065			
OXTR	5021	NP_037003	XP_144956	XP_426768	CAG06809 CAG06958	FRUP00000127611 FRUP00000149294
PPYR1	5540	NP_113769	NP_032945	XP_426511	CAG09405	FRUP00000164394
TACR1	6869	NP_036799	NP_033339	NP_990199	CAG05392 CAG12579	FRUP00000138587 FRUP00000148382 FRUP00000160726
TACR2	6865	NP_542946	NP_033340	XP_426496		
TACR3	6870	NP_058749	NP_067357	XP_001232174	CAG01274 CAG11520 CAG05682	FRUP00000132595 FRUP00000135143 FRUP00000147917
TSHR	7253	NP_037020	NP_035778	XP_426455	CAG00111	FRUP00000145651
Subtotal	49	47	48	48	63	72

Subclass A6

GHSR	2693	NP_114464	NP_796304	NP_989725	CAF95899	FRUP00000131849
GPR39	2863	DAA06056	AAH85285	XP_422128	CAG11238	FRUP00000135301
MLNR/GPR38	2862			XP_425630	CAG12790	FRUP00000138615
NMUR1	10316	NP_075588	NP_034471	XP_426705	CAF97543 CAG03466	FRUP00000153653 FRUP00000156953
NMUR2/NMU2R	56923	NP_071611	NP_694719	XP_425209	CAG03508	FRUP00000147487
NTSR1	4923	XP_345485	NP_061236	XP_425707	CAF89857	FRUP00000128303
NTSR2	23620	NP_073186	NP_032773			
TRHR	7201	NP_037179 NP_852029	NP_038724 NP_573465	XP_425702 NP_990261	CAF92799 CAF96270 CAG03888	FRUP00000134073 FRUP00000146669 FRUP00000153993
Subtotal	8	8	8	8	10	10

Subclass A7

AGTR1	185	NP_112271	NP_796296 NP_780295	NP_990488	CAG04270	FRUP00000150672
AGTR2	186	NP_036626	NP_031455	XP_426266	CAG08373	scaffold_1395
AGTRL1	187	NP_112639	NP_035914	XP_425289	CAF90289 CAF99292	FRUP00000134029 FRUP00000134030

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i> SCAF12244	<i>T. rubripes</i> FRUP00000146396 FRUP00000165603
BDKRB1	623	NP_110478	NP_031565	NP_001074189	CAG10408	FRUP00000150183 FRUP00000150187
BDKRB2	624	NP_775123	NP_033877	XP_426461		
BLR1/CXCR5	643	NP_445755	NP_031577	NP_001026083	CAG09055	FRUP00000156705
C3AR1	719	NP_114449	NP_033909	XP_416428		
C5R1	728	NP_446071	NP_031603		CAG02859	FRUP00000134135
CCBP2	1238	NP_511176	NP_067622	XP_418499		
CCR1	1230	NP_065417 XP_236742	NP_034042			
CCR2	1231	NP_068638	NP_034045			
CCR3	1232	NP_446410	NP_034044			
CCR4	1233	NP_598216	NP_034046	XP_426017	chr8_3997729_8596	FRUP00000127130
CCR5	1234	NP_446412	NP_034047	XP_418796 XP_418795		
CCR6/GPR29	1235	NP_001013163	NP_033965	XP_419608	CAF92962	FRUP00000146532
CCR7	1236	NP_955783	NP_031745	XP_425875	CAG06152	FRUP00000154746
CCR8	1237	XP_236704	NP_031746	XP_418819		
CCR9/GPR28	10803	NP_758832	NP_034043	XP_426014	CAF90274 CAG05508	FRUP00000142615
CCR10/GPR2	2826	XP_343969	NP_031747		chr2_1817756-1818529	FRUP00000140298
CCR11	51554	Q9ESK1	NP_663746		CAF88488	FRUP00000138457
CCRL2	9034	XP_236658	NP_059494			
CMKLR1	1240	NP_071554	NP_032179	XP_425239 XP_423260	CAF94854 CAF94856 CAG08499	FRUP00000145765 FRUP00000149103 FRUP00000155117
CX3CR1	1524	NP_598218	NP_034117	XP_418820	chr8_854312-855332	chrUn:212102004-3119
CXCR3/GPR9	2833	NP_445867	NP_034040		CAF98051 CAF98053	FRUP00000138635 FRUP00000138636
CXCR4	7852	NP_071541	NP_034041	NP_989948	CAF97662 CAG01848	FRUP00000134232 FRUP00000137823
CXCR6	10663		NP_109637	AAC23950		
FPR1	2357	XP_218012	NP_038549		CAG11673	scaffold_3925
FPRL1	2358	XP_001057995	NP_032068			
FPRL2	2359	XP_218016 XP_218022 XP_001073753	XP_622087 EDL38017 AAC34587 AAN63620 AAN63621			
FY	2532	NW_047399	NP_034175			
GALR1	2587	NP_037090	NP_032108	XP_426066 XP_414080	CAG00818 CAG12842	FRUP00000149875 FRUP00000153302
GALR2	8811	NP_062045	NP_034384	XP_428968	CAG12230	FRUP00000158738
GALR3	8484	NP_062046	NP_056553			

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
GPR1	2825	NP_037093	NP_666362	XP_421955		FRUP00000131794
GPR15	2838	XP_221546	XP_156321	XP_425528		
GPR24/MCH receptor 1	2847	NP_113946	NP_660114	XP_420129	CAF94024	FRUP00000130394
GPR25	2848	XP_344147	XP_357126		CAG11769	
GPR30	2852	NP_598257	NP_084047	XP_414765	CAG12216	FRUP00000146157
GPR32	2854					
GPR33	2856	NP_001026993	NP_032185			
GPR44	11251	NP_001012070	NP_034092		CAG03720	FRUP00000149198
GPR54/Kiss receptor	84634	NP_076482	NP_444474		CAG06231	FRUP00000131919
GPR7	2831	NP_001014784	XP_136404	XP_419201		
GPR77	27202	NP_001003710	NP_795886	XP_428039		
GPR8	2832			XP_425710	SCAF14682	
GPR120	338557	XP_215281	NP_861413	XP_426520		
GPR139/PGR3	124274	NP_001019412	XP_146103	XP_428970	CAG11412	AAP72123
GPR142	350383	XP_577136	NP_861414	XP_428957	CAG03049	AAP72122
GPR145/MCH receptor 2	84539				CAF99158	FRUP00000144995
GPR146	115330	XP_573364	NP_084534	XP_414764	CAG12217	scaffold_710
GPR151	134391	Q7TSN5	NP_853521		CAG01252 CAG10137	FRUP00000127188 scaffold_544
GPR152	390212	XP_001068404	NP_996856			
IL8RA	3577	NP_062183	NP_839972		CAF98991	FRUP00000127720
IL8RB	3579	NP_058879	NP_034039	XP_428206	CAF98209 chr2_16451193_2269	FRUP00000131991 FRUP00000127485
LTB4R	1241	NP_067688	NP_032545	XP_425304 XP_413985	CAF97025 CAF97026 SCAF14685	FRUP00000157228 FRUP00000159672 FRUP00000164123
LTB4R2	56413	NP_446092	NP_065236			
OPRD1	4985	NP_036749	NP_038650		CAG00040	FRUP00000153740
OPRK1	4986	NP_058863	NP_035141	XP_426087	CAG10221 CAG12280	FRUP00000142489
OPRL1	4987	NP_113757	NP_035142	XP_417424	CAG02324	FRUP00000132165
OPRM1	4988	NP_037203	NP_001034741	XP_419683	CAG10056	FRUP00000162543
RLN3R1/GPCR135/SALPR	51289	NP_001008311	NP_848832	XP_429217	CAF97176 CAG01356 CAG07748	FRUP00000153586 FRUP00000155748
RLN3R2/GPCR142/ GPR100	339403		NP_861538		CAF89883 CAF99357 CAF99875 CAF99890 CAF91545	FRUP00000127644 FRUP00000129142 FRUP00000136065
SSTR1	6751	EDM03458	NP_033242	XP_001234905		scaffold_707
SSTR2	6752	NP_062221	NP_033243	XP_425384	CAF96985 CAF96986	AAL32173 GSCT00010055001_prot scaffold_1772

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
SSTR3	6753	NP_598206	NP_033244	NP_001019754	CAF90874 CAG12520	scaffold_958 scaffold_927 scaffold_958
SSTR4	6754	NP_037168	NP_033245	XP_426102		
SSTR5	6755	NP_037014	XP_139909	XP_425241	CAG06053	
UTS2R/GPR14	2837	NP_065412	NP_663415	XP_425371 XP_425370 XP_425234 XP_416275	CAF97882 CAG02581 CAG02582 CAG12512	FRUP00000129229 FRUP00000164718 scaffold_2802
XCR1/GPR5	2829	XP_236740	NP_035928	XP_426012	CAG11634 chrUn_120676885_7499	FRUP00000159812 chrUn:277232531_5721 chrUn:164653540_7809
CC-fish	fish_4				chr8_3990155_1408	chrUn:197058105_9697
Subtotal	69	67	71	51	70	68

Subclass A8

MAS1	4142	NP_036889	NP_032578	XP_427992 XP_427991 XP_426151 XP_423677		
MAS1L	116511					
MRGPRD	116512	NP_001001506	NP_987075			
MRGPRE	116534	NP_001002288	NP_780743			
MRGPRF/MRGF	116535	NP_714944	NP_663354			
MRGPRG/MRGG	386746	NP_982296	NP_987077			
MRGPRH		NP_001002281	NP_109651			
MRGX1e/MRGX1	259249					
MRGX2e/MRGX2	117194	NP_665730 NP_001002282 NP_001002286 NP_750845	NP_694735 NP_694741 NP_694707 NP_705744 NP_997417 NP_991390 NP_997418 NP_997419 NP_997423 AX299180 AX299182 AX299184 AX299186 AX299188 AX299190 AX299192 AX299194 AX299200			
rat_MrgB3		NP_001002280 NP_001002285 AAQ08313 NP_001002287 NP_001002284 AAQ08316 GeneID_404639 NP_001002283 GeneID_404654 GeneID_404657	NP_780740 NP_997420 NP_991364 NP_997421 NP_997422 NP_991379 AX299214			
MRGX3e/MRGX3	117195					
MRGX4e/MRGX4	117196					
Subtotal	10	20	31	4	0	0

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
Class B						
ADCYAP1R1	117	NP_598195	NP_031433	XP_425958 XP_418491	CAF94168 CAF95249 CAF95250 CAG12267 CAG12268	FRUP00000135842 FRUP00000161798 FRUP00000161801 FRUP00000161807
BAI1	575	XP_343261	NP_778156	XP_418415	CAF97520 CAG10859	FRUP00000164474
BAI2	576	XP_232778	NP_775094	XP_423828	CAF99436	
BAI3	577	XP_217367	NP_783573	XP_419892	CAG09441 GSTENT00030703001	FRUP00000129349 FRUP00000143645 FRUP00000143649
CR	799	NP_446268	NP_031614	XP_425985	CAG11122 CAG13459	FRUP00000144138 FRUP00000147908
CLR	10203	NP_036849	NP_061252	XP_421850	CAF94370 CAF98969 CAG01331	FRUP00000145573 FRUP00000148605
CD97	976	NP_001012164	NP_036055		CAG12162	FRUP00000150608
CELSR1	9620	XP_235570	NP_034016	XP_423746	CAG01167	
CELSR2	1952	XP_342319	NP_059088	XP_428195 XP_426750	CAG06842	FRUP00000162857
CELSR3	1951	NP_112610	NP_536685	XP_414354	CAG03262	FRUP00000139273
CRHR1	1394	NP_112261	NP_031788	NP_989652	CAG03022	FRUP00000135485
CRHR2	1395	NP_073205	NP_034083	NP_989785		scaffold_515
ELTD1	64123	NP_071630	NP_573485	XP_422383	CAG01189	FRUP00000131264
EMR1	2015	NP_001007558	NP_034260		CAG04105	
EMR2	30817					
EMR3	84658					
EMR4b/EMR4	326342		NP_631877			scaffold_1738
GCGR	2642	NP_742089	NP_032127	XP_423402	CAG01110 CAG03726	FRUP00000135578
GHRHR	2692	NP_036982	NP_001003685	XP_418490	CAF95846	FRUP00000146088 FRUP00000146089
GIPR	2696	NP_036846	NP_001074284			
GLP1R	2740	NP_036860	NP_067307	XP_426129	CAG04358	FRUP00000146170
GLP2R	9340	NP_068620	NP_783612	XP_425358	CAF96232	FRUP00000147245
GPR56	9289	NP_689448	NP_061370	XP_413999	CAG00694	
GPR64	10149	NP_852031	NP_848827	XP_416810	CAG00549 CAG05443	FRUP00000143610 FRUP00000159461
GPR97	222487	XP_226243	NP_766624	XP_413998		FRUP00000158285
GPR110	266977	XP_217359	NP_598537			
GPR111	222611	XP_236958	XP_487485			
GPR112	139378	XP_229201	XP_141802	XP_420232	CAG09829 CAG11729	FRUP00000140064 FRUP00000140065 FRUP00000159797
GPR113/PGR23	165082	XP_233935	XP_355587			FRUP00000150114

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
GPR114	221188	XP_240979	XP_356118	XP_414000	CAG00691	
GPR115	221393		XP_900079	XP_420068		
GPR116	221395	NP_620810	XP_283438	XP_420066	CAG13000	FRUP00000153997
GPR123	84435	XP_219468	NP_803420	XP_421695	CAG10157	
GPR124	25960	EDM09091	NP_473385	ENSGALP00000004917	CAF90106	FRUP00000146680
GPR125	166647	XP_223485	XP_132089	XP_420763	CAF90021	FRUP00000153701
GPR126	57211	XP_218313	NP_001002268	XP_419712	CAF94956	FRUP00000157379
GPR128	84873	XP_221527	NP_766413			
GPR133	283383	XP_001078502	NP_001074811	XP_415094		FRUP00000137738
GPR144	347088	XP_578117	XP_355327	XP_415385	CAG01306	scaffold_1674
LPHN1	22859	NP_599235	NP_851382	XP_422382	CAG06092 chr3_11032320_65518	
LPHN2	23266	NP_075251	NP_001074767	XP_422209 XP_422381	CAF95119 CAF98480	
LPHN3	23284	NP_570835	NP_941991	XP_420575	CAF93446 CAG02284	
MASS1/VLGR1	84059	XP_342370	XP_358310	XP_429120	CAG00389	FRUP00000164895 FRUP00000164896
PTHR1	5745	NP_064458	NP_035329	XP_425837	CAF98426 CAG12650	FRUP00000144315 FRUP00000144316 FRUP00000162177
PTHR2	5746	NP_112351	NP_644676	XP_418507	CAF97204	FRUP00000128587 FRUP00000128588
SCTR	6344	NP_112377	NP_001012322	XP_422120		
VIPR1	7433	NP_036817	NP_035833	XP_418492 NP_001006328	CAF97690 CAG04243	FRUP00000137925 FRUP00000137926 FRUP00000137928 FRUP00000140671
VIPR2	7434	NP_058934	NP_033537	NP_001014970	CAF97773 CAF98740	FRUP00000128391 FRUP00000158712
Subtotal	48	44	46	42	53	50

Class C

CASR	846	NP_058692	NP_038831	XP_416491	CAG00571	BAA26122
GABBR1	2550	NP_112290	NP_062312		CAG02742	FRUP00000145292
GPR51/GABBR2	9568	NP_113990	XP_143750	XP_419066	CAG10041	FRUP00000128923
GPRC5A/RAI3	9052	NP_001073359	NP_852109	XP_416200		
GPRC5B	51704	XP_215095	NP_071865	XP_001233984	CAG06055 CAG11409	FRUP00000134725 FRUP00000143419
GPRC5C	55890	XP_213518	NP_671750	XP_425386	CAG00236 CAG03050	FRUP00000130654 FRUP00000137392 FRUP00000164268
GPRC5D	55507	XP_575701	NP_444348			
GPRC6A	222545	XP_228164	NP_694711	XP_426177		FRUP00000133733 FRUP00000163538
GRM1	2911	NP_058707	NP_058672	XP_419652	CAG03586 CAG13194	FRUP00000135014 FRUP00000143714

Gene Name	Human Gene ID	Rat	Mouse	Chicken	<i>T. nigroviridis</i>	<i>T. rubripes</i>
GRM2	2912	XP_343471	AAO85115	XP_425148	CAG06804 CAG06963	FRUP00000141550 FRUP00000149314
GRM3	2913	XP_001069653	NP_862898	XP_416842	CAG13037	FRUP00000129944
GRM4	2914	NP_073157	XP_196179	XP_418031	CAG04030	FRUP00000150481
GRM5	2915	NP_058708	XP_149971	NP_989469	CAG00460	FRUP00000140545 FRUP00000140546
GRM6	2916	NP_075209	NP_775548	XP_428614	CAF89911	FRUP00000164837
GRM7	2917	NP_112302	NP_796302	XP_414442	CAF96886 CAG11283	FRUP00000132600 FRUP00000164838
GRM8	2918	NP_071538	NP_032200	XP_425426	CAG01066 CAG12082	FRUP00000147943 FRUP00000150688
Subtotal	16	16	16	14	19	23

Class F

FZD1	8321	NP_067089	NP_067432	XP_418648		
FZD2	2535	NP_742032	NP_065256	NP_989553	CAG02812	FRUP00000148265
FZD3	7976	NP_703204	NP_067433	XP_420029	CAG00137 CAG11035	FRUP00000137946 FRUP00000150170
FZD4	8322	NP_072145	NP_032081	NP_989430	CAF96654	FRUP00000140126
FZD5	7855	NP_776210	NP_073558	XP_426568	CAF94116	FRUP00000135762
FZD6	8323	XP_343231	NP_032082	XP_418372	CAF98078	FRUP00000130766
FZD7	8324	XP_237191	NP_032083	NP_989552	CAF91294 CAG01343	FRUP00000143203
FZD8	8325	XP_344617	NP_032084	XP_418566	CAF97764 CAF98771	FRUP00000148131 FRUP00000159741 scaffold_122 scaffold_1549
FZD9	8326	NP_695217	XP_284144	XP_425392	CAF91428	FRUP00000142700
FZD10	11211	ENSRNOT00000029702	NP_780493	NP_989429	CAF94498	FRUP00000142418
SMO	6608	NP_036939	NP_795970	XP_414970	CAF97226	FRUP00000141346
Subtotal	11	11	11	11	13	14