

Report on GO annotation status for PANTHER families and subfamilies

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Available: <ftp://ftp.informatics.jax.org/pub/curatorwork/Pascale/>

Files:

families.xlsx

subfamilies.xlsx

panther subfamilies	69566
refG members	32991
two or more refG members	14583

refG organisms	subfamilies
1	18408
2	2036
3	2272
4	2559
5	3606
6	895
7	934
8	447
9	457
10	481
11	769
12	127

How many panther subfamilies have genes from how many refG organisms?

How many panther subfamilies have refG GO annotation?

What type of annotation?

panther subfamilies	69566				subfamilies with two or more refG members	14583			
subfamilies with refG members	32991								
GO annotation	F	with GO:0005515	P	C	GO annotation	F	with GO:0005515	P	C
refG exp	9033	11653	13488	12545	refG exp	6979	8864	9074	9088
=>	27%	35%	41%	38%	=>	48%	61%	62%	62%
no refG exp	23958	21338	19503	20446	no refG exp	7604	5719	5509	5495
refG exp/iss	13047	15276	15141	13901	refG exp/iss	8203	9741	9571	9514
=>	40%	46%	46%	42%	=>	56%	67%	66%	65%
no refG exp/iss	19944	17715	17850	19090	no refG exp/iss	6380	4842	5012	5069
some refG annotation	22896	24265	22385	22102	some refG annotation	12031	12810	12314	12974
=>	69%	74%	68%	67%	=>	83%	88%	84%	89%
no refG annotation	10095	8726	10606	10889	no refG annotation	2552	1773	2269	1609

For each subfamily,
what type of GO annotation (if any) does each refG organism have?

subfamily	subfamily_name	organisms	human	mouse	rat	chicken	zfish	fly	worm	dicty	dicot	yeast	pombe	ecoli
PTHR10000:SF0	PHOSPHOSERINE PHOSPHORYLATING	11	Human_e	Mouse_o	Rat_iss	Chicken	Zfish_oth	Fly_iss		Dicty_iss	Dicot_exp	Yeast_exp	Pombe_is	Ecoli_exp
PTHR10003:SF10	EXTRACELLULAR SUPER-OXIDE DISMUTASE	4	Human_o	Mouse_e	Rat_exp	Chicken_other								
PTHR10003:SF11	SUPEROXIDE DISMUTASE	12	Human_e	Mouse_e	Rat_exp	Chicken_e	Zfish_exp	Fly_iss	Worm_ex	Dicty_exp	Dicot_exp	Yeast_exp	Pombe_e	Ecoli_exp
PTHR10003:SF27	COPPER CHAPERONE FOR PROTEIN	9	Human_e	Mouse_is	Rat_exp	Chicken		Fly_exp		Dicty_iss	Dicot_exp	Yeast_exp	Pombe_exp	
PTHR10005:SF1	SMAD SUPPRESSING ELEMENT	1						Fly_other						

Experimental	Green
ISS	Yellow
Other	Red
refG gene	Organism name
No refG gene	(No entry)

Various summaries such as:
How many genes for each refG
organism are in each subfamily?

	A	B	C	D
1	family	subfamily	organism	genes
2	PTHR10000	SF0	ARATH	2
3	PTHR10000	SF0	CHICK	1
4	PTHR10000	SF0	DANRE	1
5	PTHR10000	SF0	DICDI	1
6	PTHR10000	SF0	DROME	1
7	PTHR10000	SF0	ECOLI	3
8	PTHR10000	SF0	HUMAN	1
9	PTHR10000	SF0	MOUSE	1
10	PTHR10000	SF0	RAT	1
11	PTHR10000	SF0	SCHPO	1
12	PTHR10000	SF0	YEAST	1
13	PTHR10003	SF10	CHICK	2
14	PTHR10003	SF10	HUMAN	1
15	PTHR10003	SF10	MOUSE	1
16	PTHR10003	SF10	RAT	1
17	PTHR10003	SF11	ARATH	3
18	PTHR10003	SF11	CAEEL	3
19	PTHR10003	SF11	CHICK	1
20	PTHR10003	SF11	DANRE	1
21	PTHR10003	SF11	DICDI	6
22	PTHR10003	SF11	DROME	3
23	PTHR10003	SF11	ECOLI	1
24	PTHR10003	SF11	HUMAN	1
25	PTHR10003	SF11	MOUSE	2
26	PTHR10003	SF11	RAT	1
27	PTHR10003	SF11	SCHPO	1
28	PTHR10003	SF11	YEAST	1

How many panther families have refG GO annotation?
What type of annotation?

pthr families with refG members	6594	6435	organisms	clusters
			12	307
			11	891
			10	442
			9	448
			8	455
			7	757
			6	627
			5	868
			4	484
			3	412
			2	286
			1	458

How many panther families have genes from how many refG organisms?

	F	P	C	
with refG exp ann	4293	4560	4585	
	65%	69%	70%	<=
without refG exp ann	2142	1875	1850	
with refG exp/iss	4628	4700	4716	
	70%	71%	72%	<=
without refG exp/iss	1807	1735	1719	
with refG ann	5351	5340	5571	
	81%	81%	84%	<=
without any refG ann	1084	1095	864	

For each family,
what type of GO annotation (if any) does each refG organism have?

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	family	family_name	organisms	human	mouse	rat	chicken	zfish	fly	worm	dicty	dicot	yeast	pombe	ecoli
2	PTHR10000	PHOSPHOSERINE PHOSPHATASE	11	Human	Mouse	Rat_iss	Chicken	Zfish_ot	Fly_iss		Dicty_is	Dicot_e	Yeast_e	Pombe	Ecoli_exp
3	PTHR10003	SUPEROXIDE DISMUTASE [CU-ZN]-RELATED	12	Human	Mouse	Rat_exp	Chicken	Zfish_ex	Fly_exp	Worm_e	Dicty_e	Dicot_e	Yeast_e	Pombe	Ecoli_exp
4	PTHR10005	SKI ONCOGENE-RELATED	6	Human	Mouse	Rat_iss	Chicken	Zfish_ot	Fly_other						
5	PTHR10006	MUCIN-1-RELATED	3	Human	Mouse	Rat									
6	PTHR10009	PROTEIN YELLOW-RELATED	2						Fly_exp		Dicty				
7	PTHR10010	SOLUTE CARRIER FAMILY 34 (SODIUM PI	7	Human	Mouse	Rat_exp	Chicken	Zfish_exp		Worm_other					Ecoli_exp
8	PTHR10012	SERINE/THREONINE-PROTEIN PHOSPHAT	11	Human	Mouse	Rat_iss	Chicken	Zfish_ot	Fly_iss	Worm_c	Dicty_is	Dicot_is	Yeast_e	Pombe_iss	
9	PTHR10013	GENERAL VESICULAR TRANSPORT FACTO	11	Human	Mouse	Rat_iss	Chicken	Zfish_ot	Fly_other	Worm_e	Dicty_ot	Dicot_of	Yeast_of	Pombe	

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8	PTHR10000	HUMAN	1
9	PTHR10000	MOUSE	1
10	PTHR10000	RAT	1
11	PTHR10000	SCHPO	1
12	PTHR10000	YEAST	1
13	PTHR10003	ARATH	4
14	PTHR10003	CAEEL	3
15	PTHR10003	CHICK	4
16	PTHR10003	DANRE	1
17	PTHR10003	DICDI	7
18	PTHR10003	DROME	4
19	PTHR10003	ECOLI	1
20	PTHR10003	HUMAN	3
21	PTHR10003	MOUSE	4
22	PTHR10003	RAT	3
23	PTHR10003	SCHPO	2
24	PTHR10003	YEAST	2
25	PTHR10005	CHICK	3
26	PTHR10005	DANRE	7
27	PTHR10005	DROME	2
28	PTHR10005	HUMAN	4
29	PTHR10005	MOUSE	4
30	PTHR10005	RAT	5