

MCL FAMILY NO***P. superbus* Cluster Annotation (inferred by BLAST)**

1	PSC01518 PSC01520 PSC00198 PSC02849 PSC03280 PSC03964 PSC00327 PSC04721 PSC04811	Transthyretin-like family protein
2	PSC01380 PSC01465 PSC01765 PSC01880 PSC00169 PSC03041 PSC00011 PSC03735 PSC04003 PSC04347 PSC00564 PSC00648	Aspartic protease
3	PSC01025 PSC01025 PSC01196 PSC01630 PSC01732 PSC00002 PSC02346 PSC03250 PSC03620 PSC03670 PSC04346 PSC04407 PSC04481 PSC00531 PSC00571 PSC00777	Protein kinase
4	PSC01065 PSC01847 PSC02242 PSC03374 PSC04230 PSC00851	RAS GTPase
5	PSC01018 PSC03116 PSC00408	Hsp20/alpha crystallin family protein
6	PSC01404	Ubiquitin/polyubiquitin

Additional File 5. The MCL unigene families transcripts from each nematode *Panagrolaimus*, *Aphelenchus avenae*, and *Plectus murrayi* component *P. superbus* each family.

PSC01689	
PSC03347	
PSC03474	
PSC04307	
PSC04461	
PSC00646	
7 PSC00101	RNA binding protein
PSC01873	
PSC01988	
PSC02266	
PSC02452	
PSC03378	
PSC00012	
PSC03943	
PSC04712	
PSC00710	
8 PSC01118	RNA helicase
PSC01387	
PSC02314	
PSC02648	
9 PSC01247	Glutathione S-transferase
PSC00103	
PSC02445	
PSC02624	
PSC00023	
10 PSC00143	Proteasome alpha subunit
PSC03688	
PSC04160	
11 PSC01041	Cytochrome P450 family
PSC02038	
PSC02797	
PSC02981	
PSC04824	
12 PSC01082	Guanine nucleotide binding protein
PSC00132	
PSC02327	
PSC02575	
PSC02594	
PSC00766	
PSC01008	
13 PSC02354	Elongation factor 1-alpha
PSC00064	
14 PSC01199	Malate Dehydrogenase family
15 PSC01468	RIC1 protein [<i>Phytophthora infestans</i>] emb CAB50926.1

PSC01606	
16 PSC00018 PSC04454 PSC00530	Ubiquitin-conjugating enzyme
17 PSC00271 PSC00686 PSC01642 PSC03429 PSC03851	ADP-ribosylation factor
18 PSC01525 PSC01994 PSC00873	Tubulin (both alpha and beta)
19 PSC03521 PSC04154 PSC00536	Cathepsin L-like cysteine proteinase
20 PSC02336 PSC02383 PSC02787	GLutamine synthetase (glutamate-ammonia ligase) family
21 PSC00128	Cytochrome c oxidase subunit I
22 PSC00156	Serine proteinase inhibitor
23 PSC01910 PSC03614 PSC00042 PSC00755	Heat shock protein 90
24 PSC00145 PSC02260	ALT-1 protein [Brugia pahangi] (ALT = Abundant Larval Transc
25 PSC03232 PSC00265 PSC03775	60S ribosomal protein L7a
26 PSC01665 PSC04113 PSC00997	Ring finger protein
27 PSC02744 PSC04456 PSC00402	Vacuolar H ATPase family member
28 PSC01451 PSC04333	Heat shock protein 70 Mortalin-2
29 PSC02078 PSC02288	Serine/threonine protein phosphatase

PSC00376	
30 PSC01100 PSC01241	FKBP-type peptidyl-prolyl cis-trans isomerase
31 PSC01183	RAS-responsive zinc finger transcription factor
32 PSC01107 PSC01634 PSC01879	DEAD/DEAH box helicase family prote
33 PSC00940	No BLAST hits
34 PSC03072	SH3-domain kinase binding protein
35 PSC01817 PSC00717	Elongation factor 1-beta/
36 PSC01672	Large subunit family member (rpl-9)
37 PSC03789 PSC00360	Ribosomal protein L4
38 PSC01014 PSC01290 PSC01348 PSC01899	HMG family member
39 PSC01986 PSC00370 PSC00047	Ribosomal protein L37A
40 PSC01122	Cytochrome oxidase subunit 2
41 PSC01115	Laminin receptor 1, putative
42 PSC02853 PSC00345	Cullin
43 PSC03593	Guanine nucleotide regulatory protein
44 PSC01686 PSC01912	Citrate lyase
45 PSC01452 PSC02590	Inhibitor of Cell Death family member (icd-1)
46 PSC01354	ATP-binding cassette, sub-family D
47 PSC01487'	No hits

48 PSC01791 PSC00037	Elongation factor-1
49 PSC01575	PHaryngeal gland Toxin-related family member (phat-2) [Caen
50 PSC04940 PSC00666	Chromatin-modifying protein 2b
51 PSC02044 PSC02162	Hypothetical protein
52 PSC04192 PSC00476	26S proteasome non-ATPase regulatory subunit
53 PSC00313	Lipid Binding Protein family member (lbp-6)
54 PSC01048 PSC03824	Cathepsin Z-like cysteine proteinase
55 PSC00392	Neuropeptide-Like Protein family member (nlp-2)
56 PSC02079	TropoNin I family
57 PSC01471	Glyceraldehyde 3-phosphate dehydrogenase,
58 PSC03197	60S ribosomal protein L8
59 PSC01069	Ribosomal protein S5
60 PSC00264	60S ribosomal protein
61 PSC01136	60S ribosomal protein L13
62 PSC01495 PSC04605	40S ribosomal protein S
63 PSC00585	60S acidic ribosomal protein P0
64 PSC00907	40S ribosomal protein S6
65 PSC00545	ATP Synthase B family
66 PSC00238	large subunit ribosomal protein 32
67 PSC01174	ATP synthase subunit beta

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s which contain
h the anhydrobiotic
alimus superbus,
e, *Ditylenchus africanus*
, along with a list of the
bus contigs contained in

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iorhabditis elegans]