

Table S3. Signal peptide (SP) and transmembrane domain (TMD) predictions of high confidence protein identifications (1% false discovery rate, protein probability ≥ 0.95) from *T. brucei* acidocalcisome datasets (ACCS1 and ACCS2). Predictions of TMD and SP for individual proteins were based on consensus of two or more algorithms. If the predicted number of TMD varied among the different predictions packages, we report the median number of TMD. If a protein group contained more than one protein hit (see Methods for explanation of protein grouping based on degenerate peptide fingerprints), the number of TMD and presence of SP were assigned if predicted in at least two members.

Protein Group	GeneID	Description	Group Consensus		TMHMM 2.1 # of TMD	HMMTOP 2.1 # of TMD	SignalP 4.1 Signal Peptide?	Polyphobius		Individual Consensus	
			# of TMD	Signal Peptide?				# of TMD	Signal Peptide?	TM	Signal Peptide?
1	Tb927.6.3740	heat shock 70 kDa protein, mitochondrial precursor, putative									
	Tb927.6.3750	heat shock 70 kDa protein, mitochondrial precursor, putative									
	Tb927.6.3800	heat shock 70 kDa protein, mitochondrial precursor, putative									
2	Tb927.11.6280	pyruvate phosphate dikinase									
3	Tb927.1.2330	beta tubulin									
	Tb927.1.2350	beta tubulin									
	Tb927.1.2370	beta tubulin									
	Tb927.1.2390	beta tubulin									
4	Tb927.10.6400	chaperonin HSP60, mitochondrial precursor				1					
	Tb927.10.6510	chaperonin HSP60, mitochondrial precursor				1					
5	Tb927.3.1380	ATP synthase beta chain, mitochondrial precursor,ATP synthase F1, beta subunit				1			Y		
6	Tb927.2.4210	glycosomal phosphoenolpyruvate carboxykinase									
7	Tb927.11.7460	glucose-regulated protein 78, putative,luminal binding protein 1 (BIP), putative		Y		1	Y		Y		Y
	Tb927.11.7510	glucose-regulated protein 78, putative,luminal binding protein 1 (BIP), putative				1	Y		Y		Y
8	Tb927.10.5620	fructose-bisphosphate aldolase, glycosomal									
9	Tb927.1.2340	alpha tubulin									
	Tb927.1.2360	alpha tubulin									
	Tb927.1.2380	alpha tubulin									
	Tb927.1.2400	alpha tubulin									
10	Tb927.6.4280	glyceraldehyde 3-phosphate dehydrogenase, glycosomal									
	Tb927.6.4300	glyceraldehyde 3-phosphate dehydrogenase, glycosomal									
11	Tb927.8.3530	glycerol-3-phosphate dehydrogenase [NAD], glycosomal				1			Y		
12	Tb927.11.11330	heat shock protein 70									
13	Tb927.11.9980	2-oxoglutarate dehydrogenase E1 component, putative							Y		
14	Tb927.10.15410	glycosomal malate dehydrogenase				4			Y		
15	Tb927.9.12570	glycerol kinase, glycosomal				1					
16	Tb927.5.930	NADH-dependent fumarate reductase									
17	Tb927.11.3980	mitochondrial processing peptidase alpha subunit, putative,metallo-peptidase, Clan ME, Family M16				1			Y		
18	Tb927.2.4230	NUP-1 protein, putative									
19	Tb927.3.2230	succinyl-CoA synthetase alpha subunit, putative									
20	Tb927.5.1060	mitochondrial processing peptidase, beta subunit, putative,metallo-peptidase, Clan ME, Family M16									
21	Tb927.11.5520	triosephosphate isomerase				2					
22	Tb927.4.2070	antigenic protein, putative									
23	Tb927.11.11680	2-oxoglutarate dehydrogenase E2 component, putative				1			Y		
24	Tb927.10.8030	hypothetical protein, conserved									
25	Tb927.10.7410	succinyl-CoA ligase [GDP-forming] beta-chain, putative-with=GeneDB:LmjF36.2950				1					
26	Tb927.9.5900	glutamate dehydrogenase							Y		
27	Tb927.5.2930	hypothetical protein, conserved				1					
28	Tb927.5.2080	guanosine monophosphate reductase, putative				1					
29	Tb927.9.5320	nucleolar RNA binding protein, putative	1		1	1				1	
30	Tb927.8.2770	inositol 1,4,5-trisphosphate receptor	5		5	5			7		5
31	Tb927.10.3210	delta-1-pyrroline-5-carboxylate dehydrogenase, putative									
32	Tb927.11.1020	ribokinase, putative							Y		
33	Tb927.11.2690	succinyl-coA:3-ketoacid-coenzyme A transferase, mitochondrial precursor, putative									
34	Tb927.11.1450	2-oxoglutarate dehydrogenase E1 component, putative							Y		
35	Tb927.10.14820	mitochondrial carrier protein, putative,ADP/ATP translocase 1, putative	3		3	4			2		3
	Tb927.10.14830	mitochondrial carrier protein, putative,ADP/ATP translocase 1, putative			3	4			2		3
	Tb927.10.14840	mitochondrial carrier protein, putative,ADP/ATP translocase 1, putative			3	4			2		3
36	Tb927.10.14550	ATP-dependent DEAD/H RNA helicase, putative		Y			Y				Y
37	Tb927.10.2090	elongation factor 1-alpha,EF-1-alpha									
	Tb927.10.2100	elongation factor 1-alpha,EF-1-alpha									
	Tb927.10.2110	elongation factor 1-alpha									
38	Tb927.7.7420	ATP synthase alpha chain, mitochondrial precursor,ATP synthase F1, alpha subunit		Y		1	Y		Y		Y
	Tb927.7.7430	ATP synthase alpha chain, mitochondrial precursor,ATP synthase F1, alpha subunit				1	Y		Y		Y
39	Tb927.10.2020	hexokinase									
40	Tb927.10.1510	NOT1									
41	Tb927.2.1560	cyclophilin-type peptidyl-prolyl cis-trans isomerase, putative									
	Tb927.2.1680	cyclophilin-type peptidyl-prolyl cis-trans isomerase, putative									
42	Tb927.3.3580	lipophosphoglycan biosynthetic protein, putative			1	1	Y		Y		1
43	Tb927.3.1790	pyruvate dehydrogenase E1 beta subunit, putative		Y					Y		Y
44	Tb927.10.7570	dihydrolipoamide acetyltransferase E2 subunit, putative									
45	Tb927.5.3400	calcium-translocating P-type ATPase,calcium pump	10		10	10			9		10
46	Tb927.8.3750	nucleolar protein, putative				1					
47	Tb927.1.4100	cytochrome oxidase subunit IV							Y		
48	Tb927.8.2540	3-ketoacyl-CoA thiolase, putative									
49	Tb927.8.5640	hypothetical protein, conserved									
50	Tb927.10.1170	intraflagellar transport protein IFT172, putative									
51	Tb927.10.12700	pyruvate dehydrogenase E1 alpha subunit, putative									

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119	Tb927.9.5730	nucleosome assembly protein-like protein							
120	Tb927.9.12730	chaperone protein DNAj, putative							
121	Tb927.8.3380	electron transfer protein, putative							Y
122	Tb927.11.11010	hypothetical protein, conserved							
123	Tb927.4.1500	RNA editing associated helicase 2							
124	Tb927.3.3310	60S ribosomal protein L13, putative							
	Tb927.3.3320	60S ribosomal protein L13, putative							
125	Tb927.11.5450	malic enzyme, putative							
126	Tb927.2.450	retrotransposon hot spot protein 4 (RHS4), putative						1	
127	Tb927.10.13800	hypothetical protein, conserved							
128	Tb927.10.14600	40S ribosomal protein S2, putative							
	Tb927.10.14710	40S ribosomal protein S2, putative							
129	Tb927.9.3170	cytochrome oxidase subunit V							Y
130	Tb927.10.520	hypothetical protein, conserved	1		1			1	1
131	Tb927.11.1090	calpain-like protein, putative,cytoskeleton associated protein, putative			1				
132	Tb927.8.7530	3,2-trans-enoyl-CoA isomerase, mitochondrial precursor, putative			3				Y
133	Tb927.10.450	hypothetical protein, conserved							Y
134	Tb927.11.13090	elongation factor 1 gamma, putative							Y
	Tb927.11.13190	elongation factor 1 gamma, putative							Y
135	Tb927.7.1730	60S ribosomal protein L7, putative							
136	Tb927.6.1520	aquaporin 3, putative	6		6			6	6
137	Tb927.11.6250	hypothetical protein, conserved			1				
138	Tb927.11.3590	40S ribosomal protein S4, putative						Y	
	Tb927.11.3600	40S ribosomal protein S4, putative							
139	Tb927.7.3550	hypothetical protein, conserved							
140	Tb927.3.4760	dynamins, putative,vacuolar sortin protein 1, putative							1
141	Tb927.9.10310	mitochondrial carrier protein, putative,mitochondrial phosphate transporter, putative	4		1				6
142	Tb927.9.10400	hypothetical protein, conserved							
143	Tb927.10.14500	hypothetical protein, conserved							
144	Tb927.7.1300	protein disulfide isomerase, putative					Y		Y
145	Tb927.10.3940	40S ribosomal protein S3A, putative					Y		Y
146	Tb927.2.4710	RNA-binding protein, putative							1
147	Tb927.11.2060	60S acidic ribosomal subunit protein, putative							1
	Tb927.11.2050	60S acidic ribosomal subunit protein, putative							1
148	Tb927.4.2450	thioredoxin, putative	2	Y	1		2	Y	2
149	Tb927.4.4210	ATP-dependent zinc metallopeptidase, putative,metallo-peptidase, Clan MA(E) Family M41	2		2		Y	2	Y
150	Tb927.10.7500	fibrillarin							
151	Tb927.11.3490	hypothetical protein, conserved							
152	Tb927.11.2670	Nucleoporin							Y
153	Tb927.10.3650	NADH-dependent fumarate reductase, putative							Y
154	Tb927.5.1300	vacuolar proton translocating ATPase subunit A, putative	6		6			7	6
155	Tb927.3.4970	hypothetical protein, conserved							
156	Tb927.8.4810	prohibitin 1							Y
157	Tb927.10.3990	DHH1							
158	Tb927.11.8260	carbonic anhydrase-like protein	1	Y	1		Y	1	Y
159	Tb927.8.900	splicing factor TSR1							
160	Tb927.9.2900	hypothetical protein, conserved						2	
161	Tb927.9.4210	fatty acyl CoA synthetase 3							
162	Tb927.3.1120	GTP-binding nuclear protein rtb2, putative							
163	Tb927.5.3230	hypothetical protein, conserved							2
164	Tb927.11.1270	hypothetical protein, conserved							2
165	Tb927.2.3780	translation initiation factor IF-2, putative	2		2			2	2
166	Tb927.11.13500	par1							1
167	Tb927.11.4480	radial spoke protein RSP4/6, putative							1
168	Tb927.5.1470	NADH-cytochrome b5 reductase, putative							
169	Tb927.8.1890	cytochrome c1, heme protein, mitochondrial precursor		Y			Y		Y
170	Tb927.11.2410	hypothetical protein, conserved							
171	Tb927.11.14730	metalloprotease, putative,cell division protein FtsH homologue, putative	1		1			1	1
172	Tb927.6.4090	chaperonin HSP60, mitochondrial precursor, putative							
173	Tb927.3.3490	high mobility group protein, putative							
174	Tb927.1.4310	hypothetical protein, conserved							
175	Tb927.7.1790	Adenine phosphoribosyltransferase, putative							3
176	Tb927.11.11360	guanine nucleotide-binding protein beta subunit-like protein,activated protein kinase c receptor							2
	Tb927.11.11370	guanine nucleotide-binding protein beta subunit-like protein,activated protein kinase c receptor							
177	Tb927.9.10560	hypothetical protein, conserved							
178	Tb927.3.3670	RNA-binding protein, putative							
179	Tb927.11.12150	flagellar protein essential for flagellar pocket biogenesis							
180	Tb927.10.3260	Long-chain-fatty-acid-CoA ligase 5 (EC 6.2.1.3) (Long-chain acyl-CoA synthetase 5) (LACS 5), putative							
181	Tb927.3.2180	hypothetical protein, conserved	1		1			1	1
182	Tb927.10.560	40S ribosomal proteins S11, putative							
183	Tb927.7.4770	cyclophilin-type peptidyl-prolyl cis-trans isomerase, putative							
184	Tb927.11.550	hypothetical protein SCD6.10							
185	Tb927.8.890	small GTP-binding protein Rab1, putative							

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257	Tb927.11.9400	hypothetical protein, conserved				1				
258	Tb927.7.210	proline dehydrogenase								
259	Tb927.11.8870	mitochondrial DEAD box protein,KREH1								
260	Tb927.11.1980	hypothetical protein, conserved,zinc finger protein family member, putative								
261	Tb927.4.4910	3,2-trans-enoyl-CoA isomerase, mitochondrial precursor, putative								
262	Tb927.10.16150	ATP-dependent zinc metallopeptidase, putative,metallo-peptidase, Clan MA(E) Family M41	1		1			1		1
263	Tb927.11.8050	hypothetical protein, conserved								
264	Tb927.10.2950	hypothetical protein, conserved	1		1			1		1
265	Tb927.8.1550	paraflagellar rod component, putative								
266	Tb927.5.4420	nucleolar RNA helicase II, putative,nucleolar RNA helicase Gu, putative								
267	Tb927.10.770	hypothetical protein, conserved								
268	Tb927.11.3360	hypothetical protein, conserved								
269	Tb927.6.4980	40S ribosomal protein S14								
270	Tb927.10.10280	microtubule-associated protein, putative								
271	Tb927.3.1840	3-oxo-5-alpha-steroid 4-dehydrogenase, putative	4		4			4		4
272	Tb927.11.4450	hypothetical protein, conserved								
273	Tb927.7.3370	hypothetical protein, conserved								
274	Tb927.8.4400	hypothetical protein, conserved								
275	Tb927.11.10760	kinesin-like protein, putative								
276	Tb927.10.9780	ATP-dependent DEAD/H RNA helicase, putative,ATP- dependent RNA helicase, putative								
277	Tb927.11.16510	hypothetical protein, conserved								
278	Tb927.11.17000	hypothetical protein, conserved,leucine-rich repeat protein (LRRP), putative								
279	Tb927.9.15360	40S ribosomal protein S6, putative								
280	Tb927.10.170	pseudouridine synthase, Cbf5p								
281	Tb927.3.5570	syntaxin, putative	1		1			1		1
282	Tb927.10.6630	ATP-dependent DEAD/H RNA helicase HEL64, putative								
283	Tb927.8.2740	mitochondrial RNA binding protein								
284	Tb927.10.2770	eukaryotic translation initiation factor 5, putative								
285	Tb927.7.3980	immunodominant antigen, putative,tc40 antigen-like								
286	Tb927.3.3590	U3 small nucleolar ribonucleoprotein protein MPP10, putative								
287	Tb927.11.11540	DNA topoisomerase II, putative								
288	Tb927.7.1290	hypothetical protein, conserved	1	Y	1		Y	1	Y	1 Y
289	Tb927.11.2790	hypothetical protein, conserved								
290	Tb927.8.2000	cyclophilin, putative	2		1				Y	2
291	Tb927.8.1860	pitriylsin-like metalloprotease,metallo-peptidase, Clan ME, Family M16C							Y	
292	Tb927.11.6210	sterol 14-alpha-demethylase							Y	
293	Tb927.6.4130	hypothetical protein, conserved								
294	Tb927.9.13990	RNA-binding protein, putative								
295	Tb927.6.2050	ribosome biogenesis regulatory protein (RRS1), putative								
296	Tb927.4.410	CAF 40								
297	Tb927.7.280	cyclophilin-type peptidyl-prolyl cis-trans isomerase, putative		Y			Y	1	Y	Y
298	Tb927.10.6050	clathrin heavy chain								
299	Tb927.9.14200	hypothetical protein, conserved	1		1			1		1
300	Tb927.3.5020	hypothetical protein, conserved								
301	Tb927.8.6390	lysophospholipase, putative,alpha/beta hydrolase, putative								
302	Tb927.11.6050	hypothetical protein, conserved								
303	Tb927.2.4550	FtsJ cell division protein, putative								
304	Tb927.9.15330	hypothetical protein, conserved								
305	Tb927.11.5220	chaperone protein DNAj, putative	1	Y	1		Y	1	Y	1 Y
306	Tb927.11.3500	hypothetical protein, conserved								
307	Tb927.6.1470	hypothetical protein, conserved								
308	Tb927.1.1700	hypothetical protein, conserved								
309	Tb927.2.5130	hypothetical protein, conserved								
310	Tb927.8.2630	kinesin, putative								
311	Tb927.11.6300	40S ribosomal protein S5, putative								
312	Tb927.9.1750	hypothetical protein, conserved								
313	Tb927.9.11000	small GTPase, putative,GTP-binding protein, putative								
314	Tb927.9.11850	structural maintenance of chromosome 1, putative								
315	Tb927.10.4760	hypothetical protein, conserved	3		3			3		3
316	Tb927.6.3890	replication factor C, subunit 2, putative								
317	Tb927.11.16480	enoyl-CoA hydratase/isomerase family protein, putative								
318	Tb927.7.2190	hypothetical protein, conserved	2	Y	2		Y	1	Y	2 Y
319	Tb927.7.3430	cyclophilin-type peptidyl-prolyl cis-trans isomerase, putative								
320	Tb927.11.3770	hypothetical protein, conserved								
321	Tb927.7.3330	hypothetical protein, conserved								
322	Tb927.11.7900	mitochondrial RNA binding protein,RBP16,RNA- binding protein of 16 kDa								
323	Tb927.11.10240	hsiVU complex proteolytic subunit, putative,hsiVU complex proteolytic subunit, threonine peptidase, Clan T(1), family T1B								
324	Tb927.6.2640	importin alpha subunit, putative								
325	Tb927.10.4000	methylglutaconyl-CoA hydratase, mitochondrial precursor, putative							Y	
326	Tb927.4.1540	hypothetical protein, conserved	1		1			1		1
327	Tb927.6.4630	kinetoplastid-specific phospho-protein phosphatase, putative	3		1			3	Y	3
328	Tb927.11.5600	hypothetical protein, conserved	1					1		1
329	Tb927.10.5990	hypothetical protein, conserved								

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403	Tb927.4.590	hypothetical protein, conserved	1	Y		1		3		Y		1	Y		1	Y
404	Tb927.4.600	hypothetical protein, conserved														
405	Tb927.1.1580	cytochrome c oxidase assembly factor, putative,electron transport protein SCO1/2, putative	1					1				1			1	
406	Tb927.6.2560	hypothetical protein, conserved	1	Y		1		2		Y		1	Y		1	Y
407	Tb927.11.4980	ATP-dependent DEAD/H RNA helicase, putative,ATP- dependent RNA helicase, putative														
408	Tb927.11.13510	hypothetical protein, conserved						1								
409	Tb927.11.7780	hypothetical protein, conserved	1			1		1				1			1	
410	Tb927.11.7290	pantothenate kinase subunit, putative	2					2				2			2	
411	Tb927.9.9860	hypothetical protein, conserved		Y				1		Y			Y			Y
412	Tb927.11.2510	hypothetical protein, conserved						2								
413	Tb927.7.3630	TPR-repeat-containing chaperone protein DNAJ, putative		Y				1		Y			Y			Y
414	Tb927.3.3450	ADP-ribosylation factor-like protein 3A, putative														
415	Tb927.10.15000	hypothetical protein, conserved														
416	Tb927.11.10140	hypothetical protein, conserved	2			1		3							2	
417	Tb927.11.3710	hypothetical protein, conserved														
418	Tb927.10.11300	paraflagellar rod component, putative														
419	Tb927.7.4550	60S ribosomal protein-like											Y			
420	Tb927.11.5820	hypothetical protein, conserved	6			6		7				6			6	
421	Tb927.10.3500	RNA-binding protein, putative														
422	Tb927.10.9810	hypothetical protein, conserved														
423	Tb927.10.15170	hypothetical protein, conserved														
424	Tb927.9.2650	hypothetical protein, conserved	1			1		1				1			1	
425	Tb927.11.6440	hypothetical protein, conserved														
426	Tb927.5.1520	heat shock protein HslVU, ATPase subunit HslU, putative											Y			
427	Tb927.4.4690	hypothetical protein, conserved														
428	Tb927.10.13720	RNA-binding protein, putative														
429	Tb927.3.2660	hypothetical protein, conserved														
430	Tb927.7.320	hypothetical protein, conserved														
431	Tb927.9.9060	p21 antigen protein, putative						1								
432	Tb927.11.10660	hypothetical protein, conserved														
433	Tb927.11.14090	hypothetical protein, conserved														
434	Tb927.9.8740	RNA-binding protein														
435	Tb927.7.7500	thymine-7-hydroxylase, putative														
436	Tb927.9.8160	chaperone protein DNAJ, putative														
437	Tb927.2.100	retrotransposon hot spot protein 1 (RHS1), putative	8			8		7				8			8	
438	Tb927.11.10780	hypothetical protein, conserved														
439	Tb927.2.2970	mitochondrial carrier protein, putative						4								
440	Tb927.10.4050	serine palmitoyltransferase, putative	1			1		4				1			1	
441	Tb04.24M18.150	hypothetical protein, conserved														
442	Tb927.6.4990	ATP synthase, epsilon chain, putative											Y			
443	Tb927.10.9830	hypothetical protein, conserved											Y			
444	Tb927.10.10140	paraflagellar rod component, putative														
445	Tb927.6.1570	2-hydroxy-3-oxopropionate reductase, putative														
446	Tb927.8.6240	hypothetical protein, conserved														
447	Tb927.11.1670	cysteine desulfurase		Y				1		Y			Y			Y
448	Tb927.10.1100	60S ribosomal protein L9, putative														
449	Tb927.3.2880	hypothetical protein, conserved	1					1				1			1	
450	Tb927.11.14700	hypothetical protein, conserved	2					2				1			2	
451	Tb927.10.7350	hypothetical protein, conserved														
452	Tb927.2.270	retrotransposon hot spot protein (RHS, pseudogene), putative,retrotransposon hot spot protein 3 (RHS3), frameshift														
453	Tb927.10.11390	60S ribosomal protein L6, putative														
454	Tb927.8.3290	DNA polymerase zeta catalytic subunit, putative														
455	Tb927.10.15360	hypothetical protein, conserved	2					3				2	Y		2	Y
456	Tb927.10.6640	COP-coated vesicle membrane protein erv25 precursor, putative,ER--golgi transport protein erv25 precursor, putative	2			2		2		Y		1	Y		2	Y
457	Tb927.10.4040	3-keto-dihydrosphingosine reductase	3	Y		1		5		Y			Y		3	Y
458	Tb927.10.4130	NADH-ubiquinone oxidoreductase complex I subunit, putative,NDUFA5/B13 subunit, putative														
459	Tb927.3.1410	cytochrome oxidase subunit VII														
460	Tb927.11.4650	hypothetical protein, conserved														
461	Tb927.11.6230	pretranslocation protein, alpha subunit, putative,SEC61-like (pretranslocation process) protein, putative	9			9		9				1			9	
462	Tb927.8.2020	agmatinase, putative										10				
463	Tb927.2.5270	dynein heavy chain, putative														
464	Tb927.10.10010	60S acidic ribosomal protein, putative										2				
465	Tb927.4.3890	ATP-dependent RNA helicase, putative														
466	Tb927.11.10090	hypothetical protein, conserved										1				
467	Tb927.4.3070	hypothetical protein, conserved														
468	Tb927.7.6350	NADH-ubiquinone oxidoreductase, mitochondrial, putative								Y						
469	Tb927.8.4930	hypothetical protein, conserved														
470	Tb927.1.90	retrotransposon hot spot protein (RHS, pseudogene), putative														
471	Tb927.9.6920	hypothetical protein, conserved														
472	Tb927.6.4320	hypothetical protein, conserved														
473	Tb927.7.6260	hypothetical protein, conserved	1			1		1				1			1	
474	Tb927.11.4920	hypothetical protein, conserved														
475	Tb927.11.15850	hypothetical protein, conserved														

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476	Tb927.10.510	hypothetical protein, conserved	2				2			1		2
477	Tb927.9.10520	hypothetical protein, conserved					1					
478	Tb927.10.15710	mitochondrial carrier protein, putative					5					
479	Tb927.4.3840	nucleolar protein, putative										
480	Tb927.11.13890	hypothetical protein, conserved										
481	Tb927.7.5790	protein disulfide isomerase, putative		Y			1	Y		Y		Y
482	Tb927.7.7260	kinesin, putative										
483	Tb927.4.1280	hypothetical protein, conserved										
484	Tb927.3.2080	hypothetical protein, conserved	1		1		1			1		1
485	Tb927.11.7520	hypothetical protein, conserved										
486	Tb927.5.3800	glutamine hydrolysing (not ammonia-dependent) carbomoyl phosphate synthase, putative										
487	Tb927.11.13310	hypothetical protein, conserved										
488	Tb927.7.7210	hypothetical protein, conserved										
489	Tb927.11.16750	hypothetical protein, conserved	1		1		2			1		1
490	Tb927.10.830	adenylate kinase, putative										
491	Tb927.7.6990	hypothetical protein, conserved	1		1		1			1		1
492	Tb927.11.5250	hypothetical protein, conserved	3				1			5		3
493	Tb927.10.8980	hypothetical protein, conserved										
494	Tb927.11.12040	hypothetical protein, conserved		Y			2	Y		Y		Y
495	Tb927.11.540	ABC transporter, putative	6	Y	6		7	Y	5	Y	6	Y
496	Tb927.11.6430	hypothetical protein, conserved					2					
497	Tb927.1.3450	hypothetical protein, conserved										
498	Tb927.8.6640	hypothetical protein, conserved										
499	Tb927.11.610	hypothetical protein, conserved					3					
500	Tb927.8.1870	Golgi/lysosome glycoprotein 1	1	Y	1		1	Y	1	Y	1	Y
501	Tb927.8.6050	hypothetical protein, conserved	1				1		1			
502	Tb927.6.2870	hypothetical protein, conserved					1					
503	Tb927.6.630	hypothetical protein, conserved								Y		
504	Tb927.7.4290	hypothetical protein, conserved										
505	Tb927.5.4040	hypothetical protein, conserved										
506	Tb927.10.12960	ras-related protein rab-5,small GTPase, putative										
507	Tb927.10.2550	malate dehydrogenase-related					1					
508	Tb927.3.1820	hypothetical protein, conserved										
509	Tb927.6.3670	paraflagellar rod component, putative										
510	Tb927.5.1680	hypothetical protein, conserved					1					
511	Tb927.8.4450	RNA-binding protein, putative										
512	Tb927.6.4080	hypothetical protein, conserved										
513	Tb927.6.1870	eukaryotic translation initiation factor 4e, putative										
514	Tb927.11.6660	hypothetical protein, conserved								Y		
515	Tb927.9.14420	cyclophilin-like protein, putative	1		1		1		1		Y	1
516	Tb927.10.9820	mitochondrial intermediate peptidase, putative,metallo-peptidase, Clan MA(E) Family M3								Y		
517	Tb927.11.10960	hypothetical protein, conserved								Y		
518	Tb927.11.8800	hypothetical protein, conserved	2		2		2		2			2
519	Tb927.5.2530	hypothetical protein, conserved					1					1
520	Tb927.5.3390	ADG1, pseudogene	1		1		1		1			1
521	Tb927.7.5680	deoxyribose-phosphate aldolase, putative										
522	Tb927.10.6610	chaperone protein DNAj, putative	1		1		1		1		Y	1
523	Tb927.11.9560	oxidoreductase, putative										
524	Tb927.10.3640	hypothetical protein, conserved	7		6		7		7			7
525	Tb927.6.4070	hypothetical protein, conserved	2				1		2			2
526	Tb927.11.7100	hypothetical protein, conserved										
527	Tb927.11.1680	vesicular-fusion protein SEC18, putative			1					Y		
528	Tb927.8.5860	50S ribosomal protein L17, putative										
529	Tb927.10.14770	protein kinase, putative					2					
530	Tb927.7.4460	hypothetical protein, conserved										
531	Tb927.2.2160	paraflagellar rod component, putative										
532	Tb927.10.360	hypothetical protein, conserved										
533	Tb927.7.1090	hypothetical protein, conserved										
534	Tb927.11.8030	hypothetical protein, conserved										
535	Tb927.8.3050	hypothetical protein, conserved	1		1		1		1			1
536	Tb927.11.10080	hypothetical protein, conserved										
537	Tb927.11.10210	hypothetical protein, conserved	2				2		1			2
538	Tb927.6.5090	hypothetical protein, conserved	9		9		12		9			9
539	Tb927.11.460	hypothetical protein, conserved,predicted WD40 repeat protein										
540	Tb927.11.11250	cytosolic malate dehydrogenase					1					
541	Tb927.6.1550	hypothetical protein, conserved,leucine-rich repeat protein (LRRP), putative	1		1		1		1			1
542	Tb927.7.540	chaperone protein DNAj, putative										
543	Tb927.7.5320	hypothetical protein, conserved										
544	Tb927.10.14720	peroxin 13	2				1		2			2
545	Tb927.4.1600	hypothetical protein, conserved	1		1		1		1			1
546	Tb927.9.3370	thioredoxin										
547	Tb927.10.10800	hypothetical protein, conserved	4		4		4		4			4
548	Tb927.7.3810	hypothetical protein, conserved								Y		

Transmembrane and Signal Pept

549	Tb927.10.7700	ABC transporter, putative	6			5		7			6		6
550	Tb927.8.8120	hypothetical protein, conserved	1	Y				1	Y		1	Y	1
551	Tb927.7.2670	hypothetical protein, conserved,zinc finger protein family member, putative											Y
552	Tb927.9.10070	hypothetical protein, conserved										Y	
553	Tb927.10.15950	TFIID-like protein, putative											
554	Tb927.5.1160	hypothetical protein, conserved	1	Y		1		1	Y		Y	Y	1
555	Tb927.6.2720	calcium-binding protein, putative											
556	Tb927.11.15240	small GTPase, putative,ras-related protein rab-2a, putative											
557	Tb927.10.600	hypothetical protein, conserved											
558	Tb927.9.15060	rRNA processing protein, putative											
559	Tb927.9.5040	cAMP-specific phosphodiesterase						1					
560	Tb927.8.4500	eukaryotic translation initiation factor 4 gamma, putative											
561	Tb927.9.5280	hypothetical protein, conserved											
562	Tb927.2.4090	hypothetical protein, conserved	2			2		1			Y	Y	2
563	Tb927.8.4890	endoplasmic reticulum oxidoreductin, putative,pol-associated gene 1	2	Y		1		3	Y		Y	Y	2
564	Tb927.10.790	vesicle-associated membrane protein, putative,synaptobrevin, putative	1			1		1			1		1
565	Tb927.11.3240	T-complex protein 1, zeta subunit, putative											
566	Tb927.11.10170	hypothetical protein, conserved											
567	Tb927.10.10880	ATP-binding cassette protein, putative,ABC transporter, putative,ATPase, putative						2					
568	Tb927.11.2570	hypothetical protein, conserved						1					
569	Tb927.8.3150	T-complex protein 1, gamma subunit, putative											
570	Tb927.11.11160	sodium/sulphate symporter, putative	10			9		12			10	Y	10
571	Tb927.10.14030	hypothetical protein, conserved		Y					Y			Y	Y
572	Tb927.11.2120	hypothetical protein, conserved						1					
573	Tb927.11.14960	pumilio/PUF RNA binding protein 7, putative						1					
574	Tb927.6.4970	serine/arginine-rich protein specific kinase SRPK, putative,protein kinase, putative											
575	Tb927.10.14390	hypothetical protein, conserved										Y	
576	Tb927.9.9940	PACRGB,flagellar component											
577	Tb927.10.4430	pumilio RNA binding protein PUF1											
578	Tb927.6.5210	variant surface glycoprotein (VSG, pseudogene), putative,variant surface glycoprotein, frameshift						1				Y	
579	Tb927.8.1240	electron transfer flavoprotein-ubiquinone oxidoreductase, putative											
580	Tb927.10.12260	cytosolic nonspecific dipeptidase, putative,peptidase (M20/M25/M40 family), putative											