

Table A-3: Mean length of orthologous and orphan proteins in 11 microsporidia.

Taxon	Mean length of orthologous proteins	Mean length of orphans	Wilcoxon-Mann-Whitney P_value
<i>E.hellem</i>	358,507	305,250	0,1966
<i>E.intestinallis</i>	358,931	174,630	9,11E-07
<i>E.cuniculi</i>	368,688	187,100	1,14E-10
<i>N.ceranae</i>	339,184	279,514	2,32E-09
<i>E.bieneusi</i>	274,151	182,634	p < 2,2E-16
<i>V.corneae</i>	330,872	283,743	5,05E-08
<i>A.algerae</i>	284,651	223,355	p < 2,2E-16
<i>A.locustae</i>	295,033	157,594	p < 2,2E-16
<i>E.aedis</i>	380,879	319,525	p < 2,2E-16
<i>V.culicis</i>	370,504	294,433	p < 2,2E-16
<i>N.parisii</i>	421,400	302,794	p < 2,2E-16

Table A-4: GO term annotation for 42 microsporidia specific proteins using Blast2GO.

LCA protein	GO number	Description
OG_1087	P:GO:0017183	P:peptidyl-diphthamide biosynthetic process from peptidyl-histidine
OG_1182	C:GO:0016021	C:integral component of membrane
OG_1323	F:GO:0008080	F:N-acetyltransferase activity
OG_1327	C:GO:0005643	C:nuclear pore
OG_1327	P:GO:0016973	P:poly(A)+ mRNA export from nucleus
OG_1349	C:GO:0016020	C:membrane
OG_1349	P:GO:0016192	P:vesicle-mediated transport
OG_1378	F:GO:0005515	F:protein binding
OG_1515	F:GO:0004672	F:protein kinase activity
OG_1515	F:GO:0005524	F:ATP binding