

**Table S1.** Identification of MyoC and GAP80 by mass spectrometry after co-IP performed with anti-Ty antibodies on parasites stably expressing TgMLC1Ty.

Protein identification	Number of unique peptides	List of peptides
TGME49_255190 MyoB/C	31 (33% coverage)	AATNFTCWTADCPAVK ALFEGIEIEAGK DLGNTTDAWISTYR DVSYLIGMLFQR (specific to MyoC) EALLSGMERPR EVAQLLLEQSGIPESSWVIGK FMMLDVSSHR GIQHGSISNFLLEK HLEPDSINISPEER HTIADIEYTCEGMLEK LEPSGFFLESR LYQAEGVPTEALEYTDNLALVGCALCGK NASKPEMLPPHVK NDSFFALLEDACLGR NFSEFCSHFR NPCVVVK NQSIIVSGESGAGKTEATK RHLEPDSINISPEER RLEPSGFFLESR RLQNICTVIR RPSHVCMEAYHVWR SIIYTAEPLLVAINPFK SYHIFYQLLK TMVFVKPDAAK TTIQDTIMAGNPILEAFGNAK VGPQVIEGVR VIHFLTR VLNQLFSLILEALQLR VVSQEANER WLDLGLVNSDR
TGME49_246940 GAP80	7 (27% coverage)	AAQEIPAKQPEEEEEETQIPLR AEDLGEAPLSRPASIPVEMTTR DFDFSDIPVLQ EASQEVQLVNRDPVPVSPPPK LAELETLQTLAEVTTYR NPFGFCFGGGK TRAEDLGEAPLSRPASIPVEMTTR

Accession numbers are from EupathDB (Aurrecochea et al., 2007).