

Figure S1. Measurement of nelfinavir in the fluid of cysts by HPLC. The concentrations of nelfinavir in the metacystode cysts that had been treated with nelfinavir (40 μ M) for 6 hours (6h) and 12 hours (12h) were measured by high performance liquid chromatography (HPLC) (a). The levels of nelfinavir in the cyst fluid accumulated over time after treatment (b). Data shown are represented as mean \pm SD (n = 3). *** P < 0.001 using the two-sided *Student-t* test.

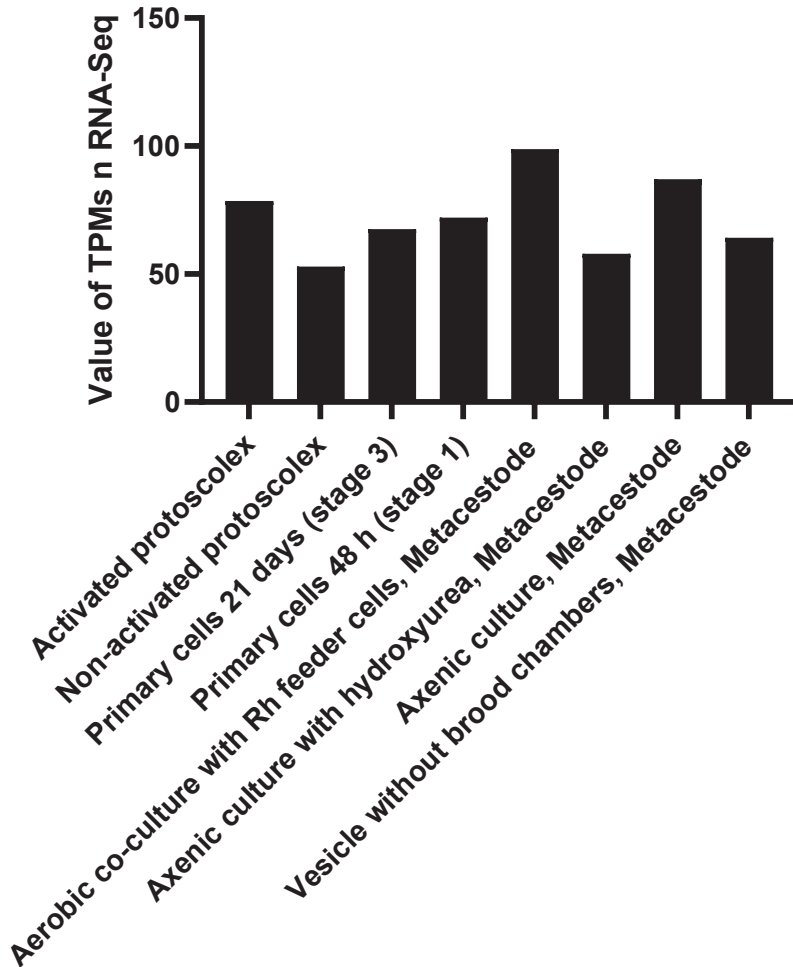
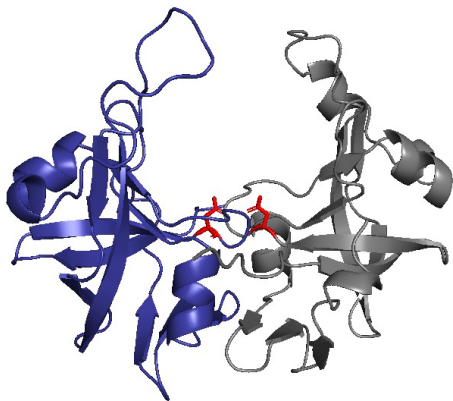


Figure S2. The gene expression levels of *EmuDdi1* at different stages or conditions. The gene expression data were retrieved from RNA-seq data deposited in WormBase (https://parasite.wormbase.org/expression/echinococcus_multilocularis_prjeb122/index.html). The data indicate that *EmuDdi1* is constitutively expressed in all the studied survival conditions or developmental stages for *E. multilocularis*. TPM (Transcript per million) is shown for counting the gene expression.

a



b

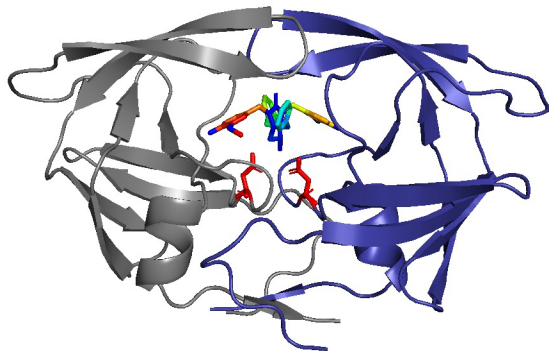


Figure S3. The predicted 3D structure of *EmuDdi1*. Homology-based prediction of 3D structure for *EmuDdi1* (a) by Swiss-Model shows that *EmuDdi1* highly resembles the determined 3D structure for HIV protease dimer (PDB ID: 1pro) (b) at the active center, which would be competitively inhibited by HIVPIs.

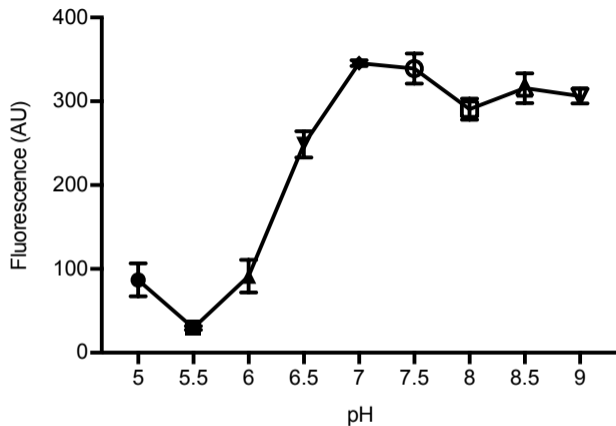


Figure S4. The effect of pH on *EmuDdi1* activity. The recombinant *EmuDdi1* (2 μ M) was incubated with the substrate (2 μ M) in a buffer with pH varying from 5-9, and the optimum pH is between 7-7.5 (n =3).