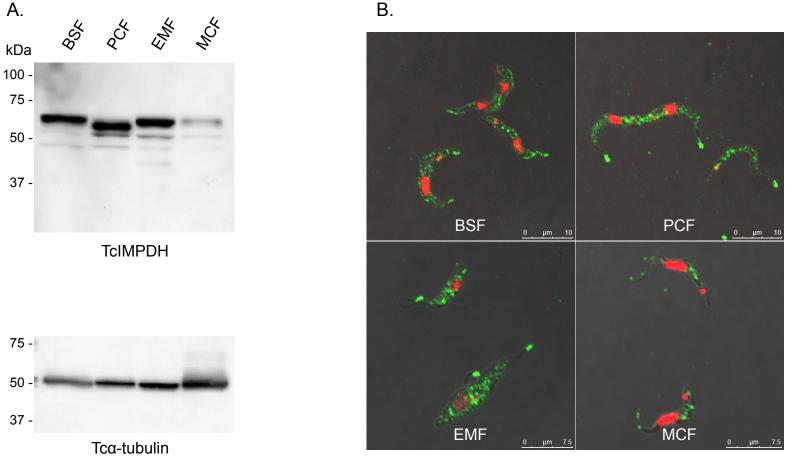


Supplemental Figure 1. The enzymatic activity of TcIMPDH and the inhibition of TcIMPDH by mycophenolic acid

The activity of IMPDH was evaluated, based on the detection of the enzymatic product NADH, as the increasing absorbance at 340 nm. The data represent the mean values of three independent experiments.

- (A) The dose-dependent assay of TcIMPDH. The assay was carried out for 60 minutes in standard IMPDH buffer with various concentrations of enzyme.
- (B) The time-course assay of TcIMPDH. The assay was carried out for various reaction times in standard IMPDH buffer with a TcIMPDH concentration of 40 nM.
- (C) MPA has been known as a specific noncompetitive inhibitor of IMPDH. A dose-dependent assay of MPA was carried out in the presence of 250 μM IMP, 800 μM $\beta\text{-NAD}^+,$ and 40 nM TcIMPDH. The data represent the mean values of three independent experiments.



Supplemental Fig. 2. The expression profile and localization of TcIMPDH

- (A) Western blotting was performed with 5 μg of total cell protein extracted from BSF, PCF, EMF, and MCF using anti-TcIMPDH and anti-Tc α-tubulin antibodies.
- (B) Indirect immunofluorescence staining using anti-TcIMPDH antibody was observed by confocal laser scanning microscopy. Nucleolus and kinetoplast DNAs were subjected to Hoechest 33342 staining and are shown in red. The images were constructed by merging a fluorescence image and a differential interference contrast image. Each of the microscopy images was captured using the same photomultiplier tube gain and voltage.