

## **Description of Additional Supplementary Files**

File Name: Supplementary Movie 1

Description: Time-lapse light microscopy showing parasitophorous vacuole rupture with egress of *C. parvum* and formation of new parasitophorous vacuoles.

File Name: Supplementary Movie 2

Description: Time-lapse light microscopy showing the effect of DMSO (negative control) on rupture and formation of *C. parvum* parasitophorous vacuoles vs. time. Several vacuoles are observed rupturing, with formation of 2-3 smaller vacuoles nearby.

File Name: Supplementary Movie 3

Description: Time-lapse light microscopy showing the effect of compound C-1 (positive control) on rupture and formation of *C. parvum* parasitophorous vacuoles vs. time. No vacuole rupture or new vacuole formation is observed in the presence of C-1.