

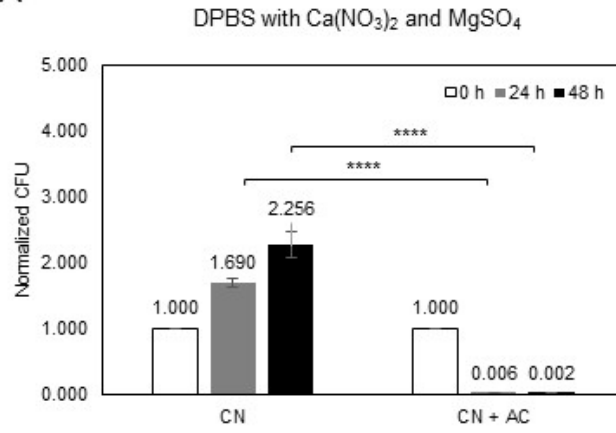
**Fig S1.** Different forms of magnesium and calcium also affects the outcome of the *A. castellanii*-*C. neoformans* interaction. (A) The assay of *A. castellanii*-*C. neoformans* interaction was performed in DPBS supplemented with magnesium sulfate and calcium nitrate. The survival of *C. neoformans* was determined by CFU after incubation with *A. castellanii* for 0, 24 and 48 h. The CFU counts at 24 h and 48 h were normalized to the initial CFU at time zero. Data represent the mean of three biological samples. Error bars are SD. \*\*\*\*  $P < 0.0001$  by Student's t test. (B) The viability of *A. castellanii* were determined by trypan blue exclusion assay. The percentage of dead *A. castellanii* is determine by counting the number of blue staining cells per total cell number counted. Three independent biological experiments were performed. Error bars represent 95 % confidence interval of the mean.

**Fig S2.** Pretreated *C. neoformans* or/and *A. castellanii* with DPBS containing  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$  did not affect the outcome of the interaction. The survival of *C. neoformans* and the viability of *A. castellanii* were determined when (A-B) *C. neoformans* was pretreated (C-D), *A. castellanii* was pretreated, and (E-F) both *C. neoformans* and *A. castellanii* were pretreated with DPBS containing  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$  in prior to the co-incubation of *C. neoformans* and *A. castellanii* in DPBS. Three biological samples were performed in each condition. For the data of the viability of *A. castellanii*, error bars represent 95 % confidence interval of the mean. \*  $P < 0.05$  \*\*  $P < 0.01$  \*\*\* $P < 0.001$  \*\*\*\*  $P < 0.0001$  by Fisher's exact test by Fisher's exact test. For the data of *C. neoformans* survival, error bars are SD.

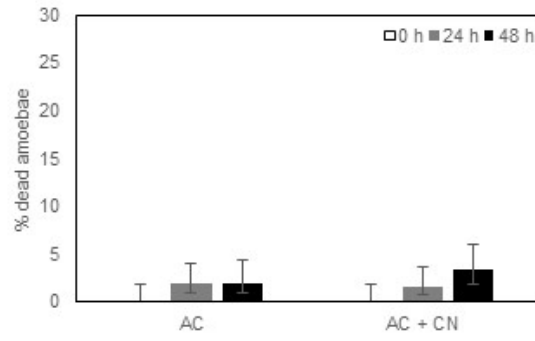
**Movie S1.** Time-lapse microscopy of co-incubation of *C. neoformans* and *A. castellanii* in DPBS with  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$ .

# Supplementary figure 1

A



B



## Supplementary figure 2

