Expanded View Figures

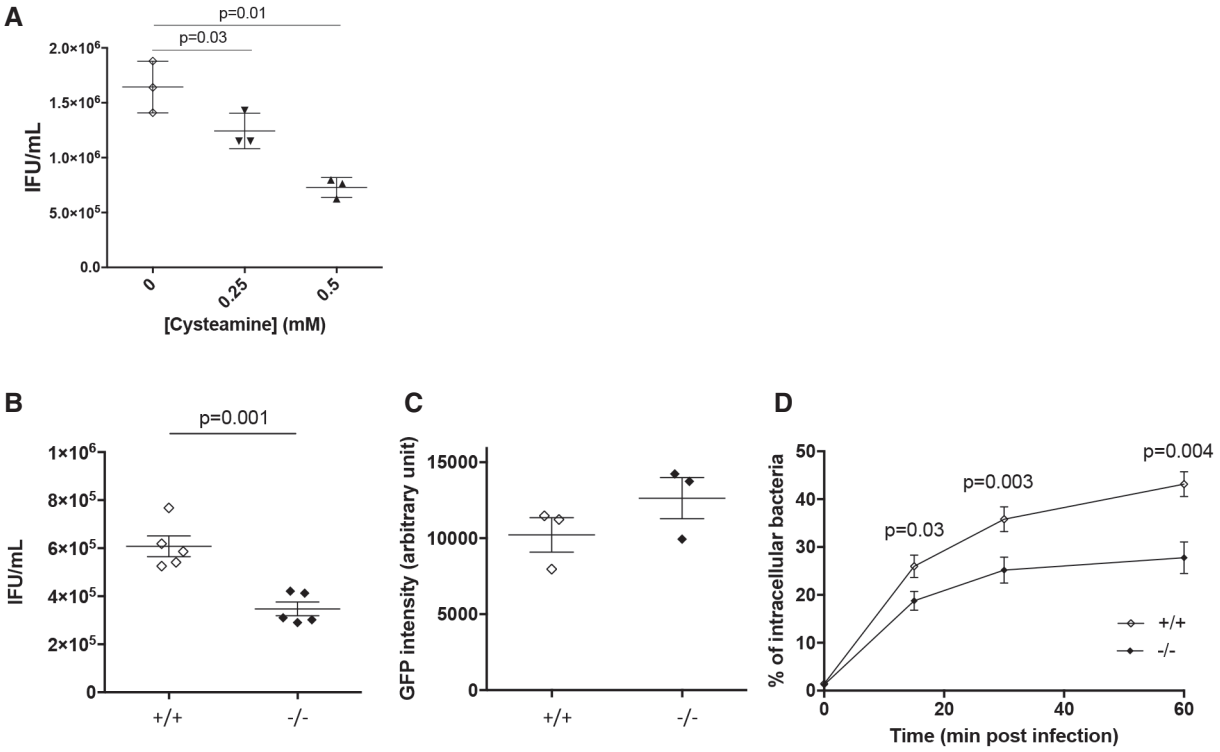

Figure EV1. TG2 is beneficial for bacterial development (related to Fig 2).

A HeLa cells were pre-treated with the indicated concentrations of cysteamine for 2 h before being infected with $L2^{incD}$GFP at MOI = 0.15. Thirty hours later, the cells were disrupted and bacterial titers (IFU) were determined by re-infecting fresh HeLa cells as described in the methods. The mean ± SD of three independent experiments is shown. *P*-values of Student's paired *t*-test are indicated.

B $TG2^{+/+}$ and $TG2^{-/-}$ MEFs were infected with $L2^{incD}$GFP at MOI = 0.15. Thirty hours later, the cells were disrupted and bacterial titers were determined by re-infecting fresh $TG2^{+/+}$ cells as described in the methods. The mean ± SD of five independent experiments and *P*-value from Student's paired *t*-test are shown.

C To measure bacterial adhesion, $TG2^{+/+}$ and $TG2^{-/-}$ MEFs were incubated at 4°C for 4 h with $L2^{incD}$GFP at MOI = 10 before being washed and fixed as described in the methods. The mean ± SD of three independent experiments is shown.

D $TG2^{+/+}$ and $TG2^{-/-}$ MEFs were infected with $L2^{incD}$GFP at MOI = 10 and fixed at the indicated time. Extracellular bacteria were differentially labeled as described in the methods. The mean ± SD of three independent experiments, and *P*-values from Student's paired *t*-test, is shown.

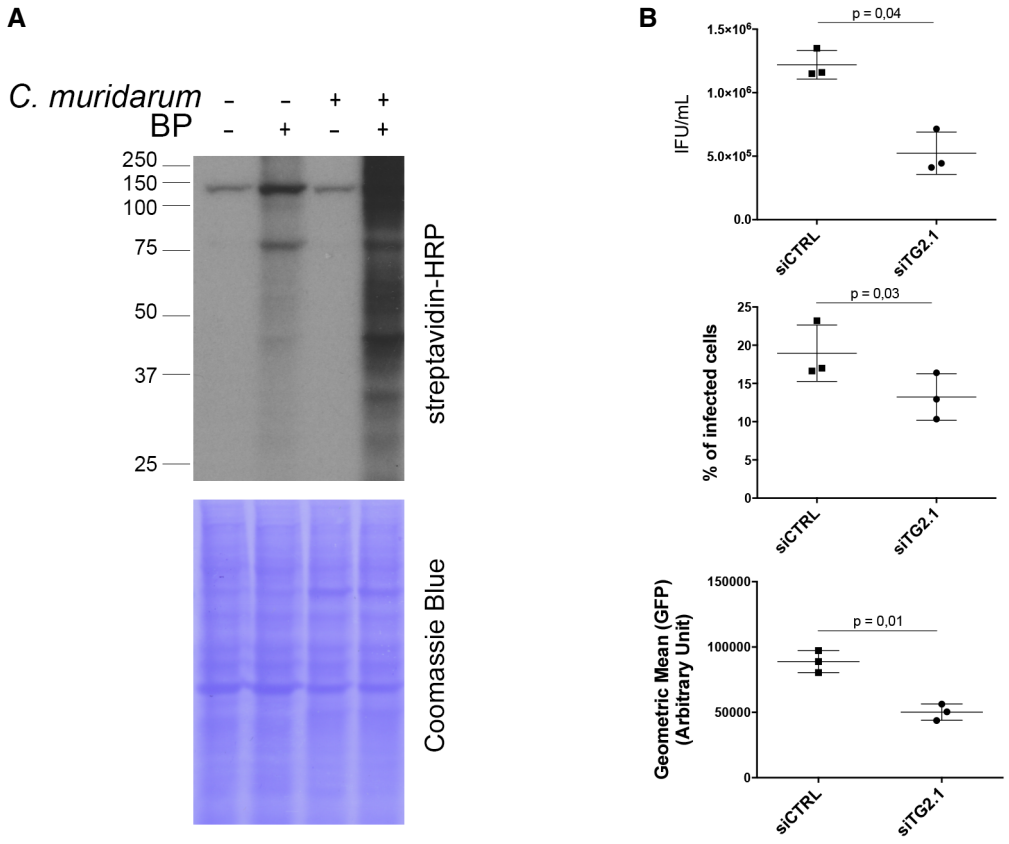

Figure EV2. Infection by *C. muridarum* activates TG2, which favors bacterial growth (related to Fig 2).

A Whole cell lysates were prepared with HeLa cells infected or not for 48 h with *C. muridarum* (MOI = 1) in the presence or not of BP. Cell lysates were run on SDS–PAGE, proteins were transferred to a membrane, and BP incorporation was revealed with HRP-conjugated streptavidin.

B HeLa cells were transfected with siRNA against TG2 for 48 h before being infected in duplicates with *C. muridarum* at MOI = 0.15. Thirty hours later, one set of cells were disrupted and bacterial titers (IFU = inclusion-forming unit) were determined by re-infecting fresh HeLa cells as described in the methods. The mean ± SD of three independent experiments and *P*-values of Student's paired *t*-test are shown (top). Duplicate wells were incubated further for a total of 48 h before the cells were fixed, permeabilized with 0.3% Triton X-100, and stained with rabbit antibodies against *C. muridarum* GroEL followed with A488-coupled anti-rabbit secondary antibodies. Samples were analyzed by flow cytometry, and the percentage of infected cells (middle) and the mean fluorescence of the infected population (bottom) ± SD are shown for three independent experiments; *P*-values of Student's paired *t*-test are indicated.

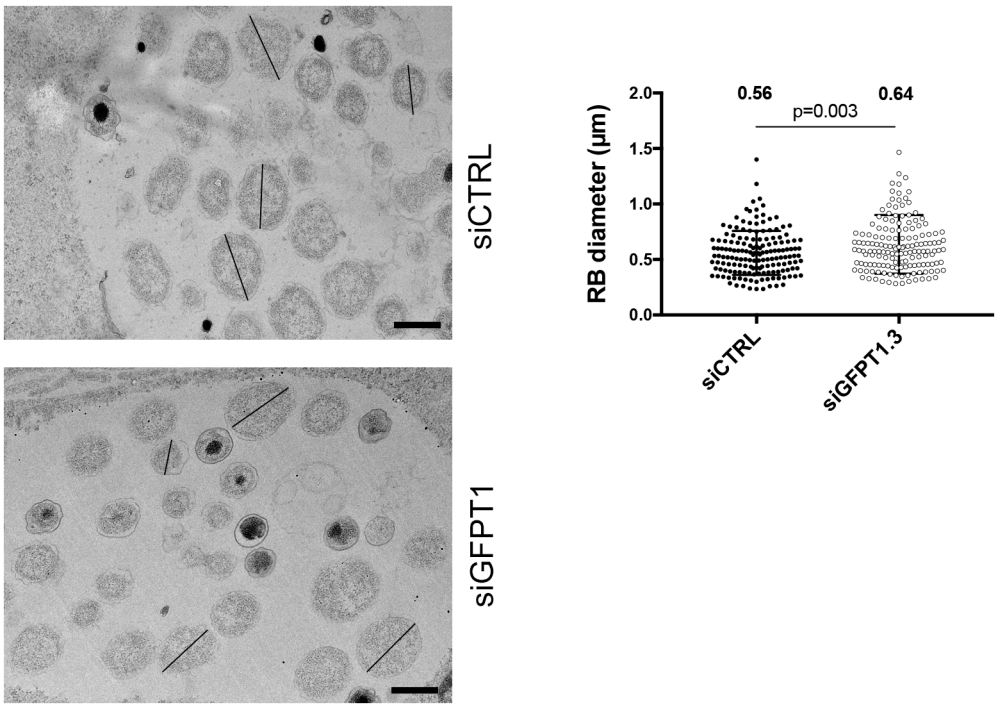

Figure EV3. GFPT silencing affects bacterial division (related to Fig 6).
HeLa cells treated for 48 h with siRNA targeting GFPT1 or not (siCTRL) were infected with *C. trachomatis* (MOI = 1), fixed 30 hpi, and processed for transmission electron microscopy. Lines show example of measured RB diameters. Scale bar = 600 nm. RB diameters were measured using ImageJ on > 300 bacteria in one experiment. Each dot represents one RB; the mean value ± SD and *P*-value of Student's paired *t*-test are indicated.