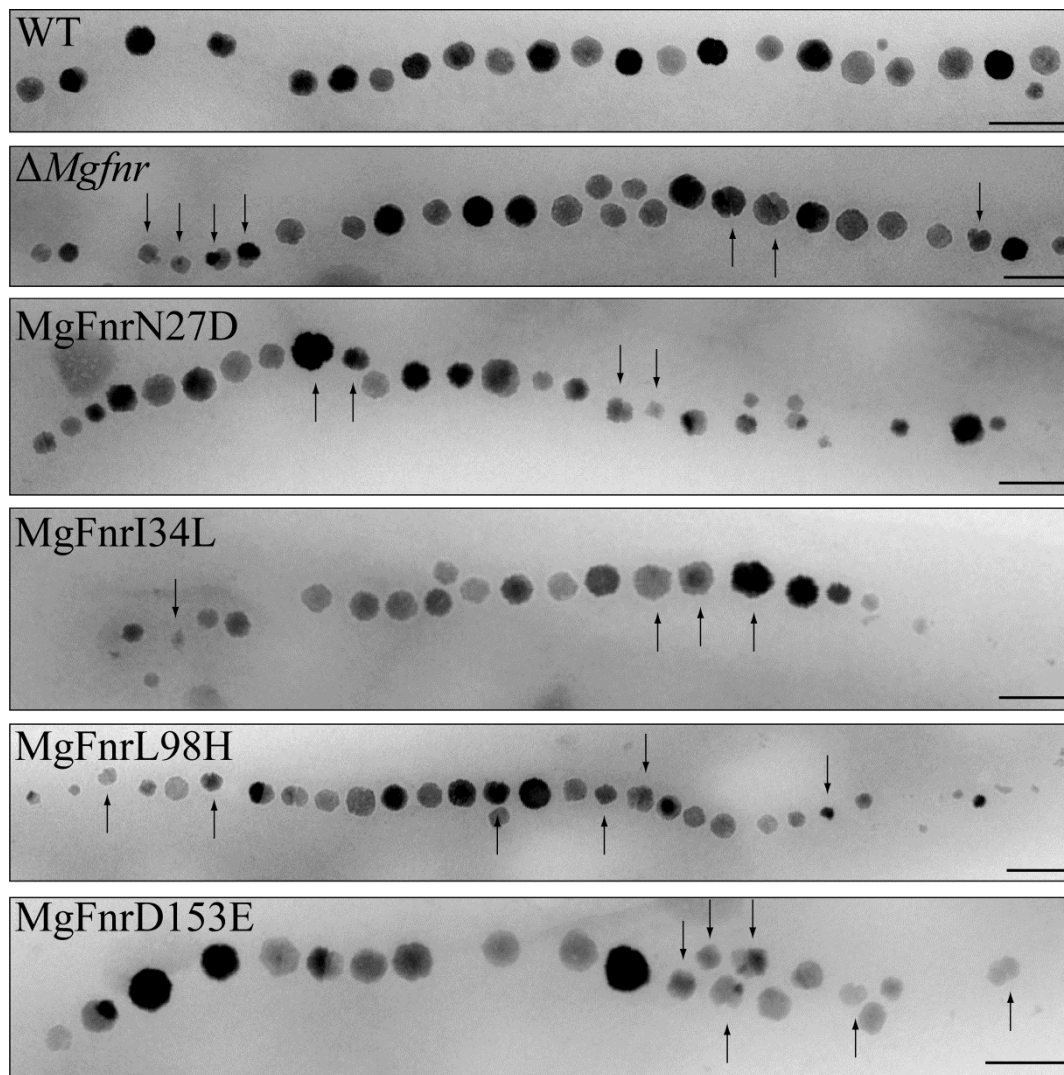




**Additional file 4:** Magnetosome formation in different *Mgfnr* variant strains. Cells were grown in microaerobic nitrate medium. Bar, 100 nm. Irregular shaped particles are indicated by black arrows.