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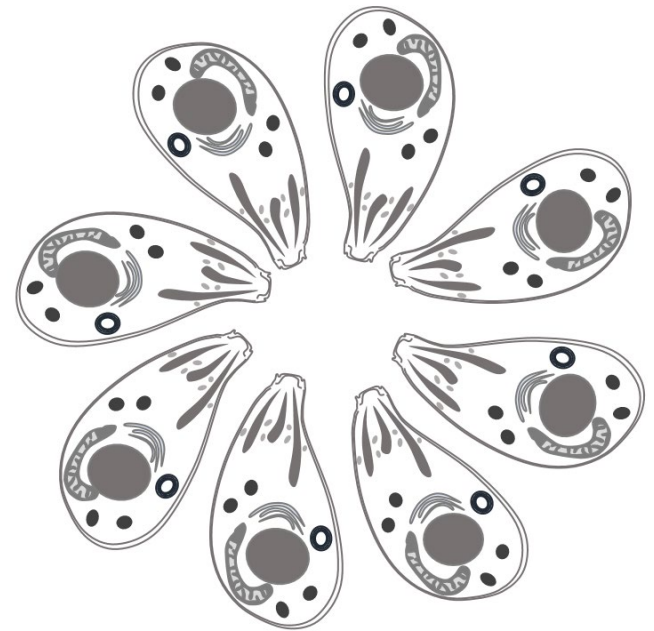
Functional redundancy of three mitochondrial Mg²⁺/Mn²⁺- dependent protein phosphatases (PPMs) in *Toxoplasma gondii*

Key words: *Toxoplasma gondii*, Mitochondria, PPMs, Functional redundancy, Proliferation

Research Summary

This article focuses on three Mg^{2+}/Mn^{2+} -dependent protein phosphatases of *T. gondii*, TgPPM8, TgPPM10 and TgPPM19, and reports the characterization in the following aspects:

- **Mitochondrial localization**
- **Involvements in cell growth, proliferation of tachyzoites**
- **Transcriptional complement**
- **Functional redundancy**



Innovation points

- *Tg*PPM8, *Tg*PPM10, and *Tg*PPM19 are localized to the mitochondrial matrix of *T. gondii*.

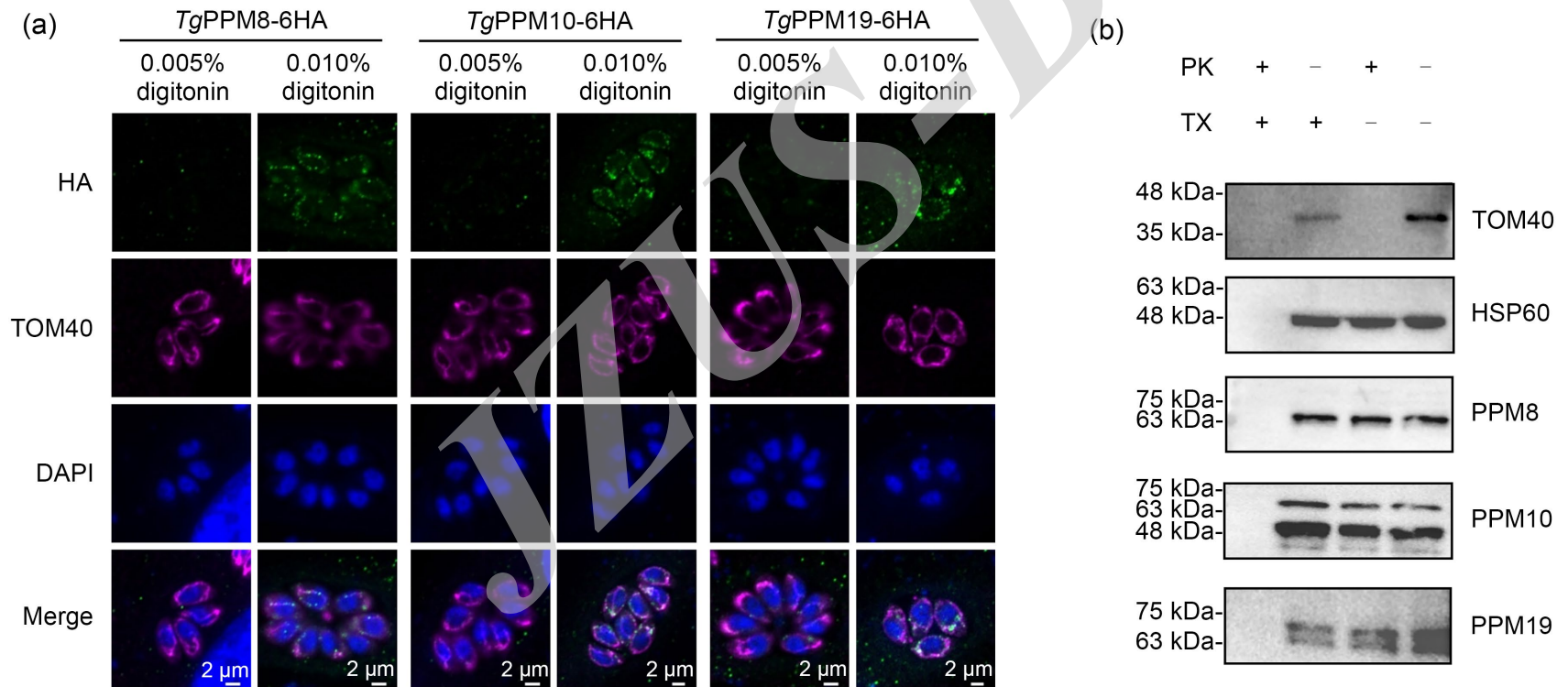


Figure 1

Innovation points

- Three mitochondrial PPMs (*TgPPM8*, *TgPPM10* and *TgPPM19*) appear to be important in the growth and proliferation of *T. gondii* tachyzoites *in vitro*, with a functional redundancy.

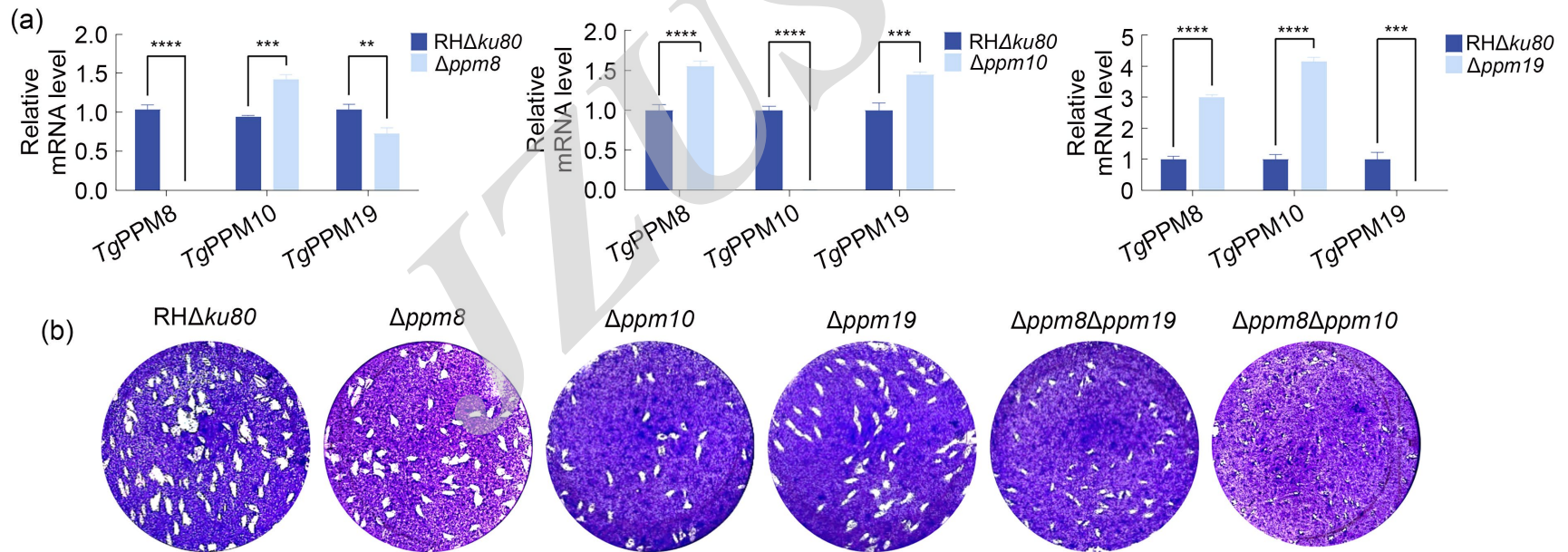


Figure 2