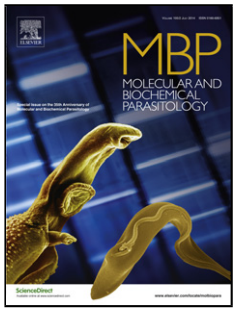

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Modulation of cholesterol-related sterols during *Eimeria* bovis macromeront formation and impact of selected oxysterols on parasite development

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Highlights

- *E. bovis* triggers host cellular sterol uptake from extracellular sources
- *E. bovis* induces endogenous cholesterol synthesis in a proliferation-dependent manner
- 25 hydroxycholesterol is selectively enhanced in *Eimeria bovis*-infected host cells
- oxysterols treatments of *E. bovis*-infected host cells blocks parasite proliferation

Abstract

Obligate intracellular apicomplexan parasites are considered as deficient in cholesterol biosynthesis and scavenge cholesterol from their host cell in a parasite-specific manner. Compared to fast proliferating apicomplexan species producing low numbers of merozoites per host cell, (e. g. *Toxoplasma gondii*),