

**EARLY DETECTION OF *Toxoplasma gondii* TO THE EYES OF MICE
(*Mus musculus*) BY POLYMERASE CHAIN REACTION
METHODS**

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ABSTRACT

The aim of the study to examined the early time of *Toxoplasma gondii* reach the eyes post infection. Surface Antigen 1 (SAG-1) was known as the most important antigen in *T. gondii* tachyzoite invasion. In this study, we used SAG-1 as target genes to detect early invasion of *T. gondii* in the eyes by Polymerase Chain Reaction (PCR). Samples were collected every 12 hours from 18 male mice Balb/C strain which inoculated by the intraperitoneal route with 1×10^3 tachyzoites of RH strain of *T. gondii*. DNA extracted from whole part of eyes and amplified by PCR. The result was confirmed by agarose electrophoresis gel. Gen band with length 806 bp was found only in sample with 9 days post infection. Therefore, this result show that dissemination of *T. gondii* to the eyes was early detected by PCR within 9 days following intraperitoneally infection

Key words: tachyzoite of *T. gondii*, SAG-1, eyes, PCR.