

Monoclonal Anti-*Toxoplasma gondii* Rhoptyr Enriched Subcellular Fraction ROP2-ROP4, Clone T3 4A7 (produced *in vitro*)

Catalog No. NR-50252

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG1κ

Mouse monoclonal antibody prepared against the rhoptyr enriched subcellular fraction ROP2-ROP4 of *Toxoplasma gondii* (*T. gondii*) clone T3 4A7 was purified from the hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of SP2/0 myeloma cells with immunized BALB/c mouse splenocytes. Clone T3 4A7 recognizes the rhoptyr proteins ROP2/ROP3/ROP4.¹⁻³ Rhoptyr proteins are released concurrent with the formation of the parasitophorous vacuole (PV) and are thought to contribute to both the formation and functional properties of the PV membrane.^{2,3}

Material Provided:

Each vial contains approximately 100 µL of purified monoclonal antibody in PBS (pH 7.4). The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-50252 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-50252 is reported to react with denatured and native ROP2, ROP3 and ROP4 and to function in immunofluorescence and immunoblot assays.¹⁻³

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-*Toxoplasma gondii* Rhoptyr Enriched Subcellular Fraction ROP2-ROP4, Clone T3 4A7 (produced *in vitro*), NR-50252."

Biosafety Level: 1

Appropriate safety procedures should always be used with this

material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Dubremetz, J. F., Personal Communication.
2. Sadak, A., et al. "Characterization of a Family of Rhoptyr Proteins of *Toxoplasma gondii*." Mol. Biochem. Parasitol. 29 (1988): 203-211. Pubmed: 3045541.
3. Carey, K. L., et al. "The *Toxoplasma gondii* Rhoptyr Protein ROP4 is Secreted into the Parasitophorous Vacuole and Becomes Phosphorylated in Infected Cells." Eukaryot Cell 3 (2004): 1320-1330. Pubmed: 15470260.

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