Monoclonal Anti-*Toxoplasma gondii* ROP2 Protein, Clone T5 2D1 (produced *in vitro*)

Catalog No. NR-50265

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 rhoptry protein 2 (ROP2) of *Toxoplasma gondii* clone T5 2D1 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 T5 2D1 recognizes the ROP2 protein.[1] Rhoptry 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] ROP2 is the founding member of the ROP2 family of proteins (ROP2, ROP3/ROP8 and ROP4) and mediates the association of PV and host cell mitochondria.[2,3] ROP2 is also important for rhoptry biogenesis, parasite invasion and intracellular replication.[2]

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-50265 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-50265 is reported to react with ROP2 and to function in immunofluorescence and immunoblot assays.[1,4]

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-*Toxoplasma gondii* ROP2 Protein, Clone T5 2D1 (produced *in vitro*), NR-50265."

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.

Disclaimers:
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References:
1. Dubremetz, J. F., Personal Communication.
2. Nakaar, V., et al. "Pleiotropic Effect Due to Targeted Depletion of Secretory Rhoptry Protein ROP2 in *Toxoplasma gondii*." J. Cell Sci. 116 (2003): 2311-2320. PubMed: 12711703.
3. Sinai, A. P. and K. A. Joiner. "The *Toxoplasma gondii* Protein ROP2 Mediates Host Organelle Association with the Parasitophorous Vacuole Membrane." J. Cell Biol. 154 (2001): 95-108. PubMed: 11448993.

4. Hérion, P., et al. "Subcellular Localization of the 54-kDa Antigen of *Toxoplasma gondii*." J. Parasitol. 79 (1993): 216-222. PubMed: 7681478.

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