Datasheet: OBT2002

Description:	MOUSE ANTI LEISHMANIA LPG (REPEAT EPITOPE)
Specificity:	LEISHMANIA LPG (REPEAT EPITOPE)
Format:	Ascites
Product Type:	Monoclonal Antibody
Clone:	CA7AE
Isotype:	IgM
Quantity:	0.5 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/1000
Immunofluorescence	▪			1/500 - 1/1000
Immunoblotting	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Protozoan

Product Form

Ascites - lyophilized

Reconstitution

Reconstitute with 0.5 ml distilled water
Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended.

Preservative Stabilisers

None present

Immunogen

Heat killed *Leishmania donovani* promastigotes.

RRID	AB_619110
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the murine SP2/0 myeloma cell line.
Specificity	**Mouse anti *Leishmania* lipophosphoglycan antibody, clone CA7AE** recognizes lipophosphoglycan (LPG) the major cell surface glycoconjugate of *Leishmania* parasites. Mouse anti *Leishmania* lipophosphoglycan antibody, clone CA7AE recognizes the repeat carbohydrate epitope of most species of *Leishmania* LPG. The epitope is also found on the excreted acid phosphatase of *Leishmania* and is expressed on the surface of *Leishmania* infected macrophages (Tolson *et al.* 1990). Mouse anti *Leishmania* lipophosphoglycan antibody, clone CA7AE recognizes the promastigotes of *Leishmania donovani* but not those of the related species *L. tropica* (Jaffe and Sarfstein 1987, Sundar *et al.* 2001). Mouse anti *Leishmania* lipophosphoglycan antibody, clone CA7AE does however recognize a broad range of *L. donovani* and *L. major* strains and related species including *L. infantum*, *L. m. mexicana*, *L. aethiopica* and *L. b. panamensis* (Tolson *et al.* 1994).
References	1. Sundar, S. *et al.* (2001) Resistance to treatment in Kala-azar: speciation of isolates from northeast India. Am J Trop Med Hyg. 65: 193-6. 2. Tolson, D.L. *et al.* (1990) Expression of a repeating phosphorylated disaccharide lipophosphoglycan epitope on the surface of macrophages infected with *Leishmania donovani*. Infect Immun. 58: 3500-7. 3. Butcher, B.A. *et al.* (1996) Deficiency in beta1,3-galactosyltransferase of a *Leishmania major* lipophosphoglycan mutant adversely influences the *Leishmania*-sand fly interaction. J Biol Chem. 271: 20573-9. 4. Goyard, S. *et al.* (2003) An *in vitro* system for developmental and genetic studies of *Leishmania donovani* phosphoglycans Mol Biochem Parasitol. 130: 31-42. 5. Soares, R.P. *et al.* (2004) *Leishmania tropica*: intraspecific polymorphisms in lipophosphoglycan correlate with transmission by different *Phlebotomus* species. Exp Parasitol. 107: 105-14. 6. Amprey, J.L. *et al.* (2004) Inhibition of CD1 expression in human dendritic cells during intracellular infection with *Leishmania donovani*. Infect Immun. 72: 589-92. 7. Coelho-Finamore, J.M. *et al.* (2011) *Leishmania infantum*: Lipophosphoglycan intraspecific variation and interaction with vertebrate and invertebrate hosts. Int J Parasitol. 41: 333-42. 8. Capul, A.A. *et al.* (2007) Two Functionally Divergent UDP-Gal Nucleotide Sugar Transporters Participate in Phosphoglycan Synthesis in *Leishmania major* J Biol Chem. 282: 14006-17. 9. Vinet, A.F. *et al.* (2009) The *Leishmania donovani* lipophosphoglycan excludes the vesicular proton-ATPase from phagosomes by impairing the recruitment of synaptotagmin V. PLoS Pathog. 5: e1000628. 10. Rebech, G.T. *et al.* (2023) miR-148a regulation interferes in inflammatory cytokine and parasitic load in canine leishmaniasis. PLoS Negl Trop Dis. 17 (1): e0011039. 11. Costa, S.F. *et al.* (2024) MicroRNA-194 regulates parasitic load and IL-1β-dependent nitric oxide production in the peripheral blood mononuclear cells of dogs with leishmaniasis. PLoS Negl Trop Dis. 18 (1): e0011789.

Storage	This product is shipped at ambient temperature. Prior to reconstitution store at +4°C. After reconstitution store at -20°C. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10484 available at: https://www.bio-rad-antibodies.com/SDS/OBT2002 10484
Regulatory	For research purposes only

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	**Worldwide**	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M441547:250523'

Printed on 23 May 2025