

## Datasheet: OBT2002

<b>Description:</b>	MOUSE ANTI LEISHMANIA LPG (REPEAT EPITOPE)
<b>Specificity:</b>	LEISHMANIA LPG (REPEAT EPITOPE)
<b>Format:</b>	Ascites
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CA7AE
<b>Isotype:</b>	IgM
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Protozoan
<b>Product Form</b>	Ascites - lyophilised
<b>Reconstitution</b>	<p>Reconstitute with 0.5 ml distilled water</p> <p>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.</p>
<b>Preservative Stabilisers</b>	None present
<b>Immunogen</b>	Heat killed <i>Leishmania donovani</i> promastigotes.

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**Fusion Partners** Spleen cells from immunised BALB/c mice were fused with cells of the murine SP2/0 myeloma cell line.

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**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](#)).

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**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.](#)

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**Storage**

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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10194 available at:  
10194: <https://www.bio-rad-antibodies.com/uploads/MSDS/10194.pdf>

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**Regulatory** For research purposes only

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