

Datasheet: HCA095

Description:	HUMAN ANTI MYELIN PROTEOLIPID PROTEIN
Specificity:	MYELIN PROTEOLIPID PROTEIN
Other names:	PLP
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD05702
Isotype:	HuCAL Fab bivalent
Quantity:	0.1 mg

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	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/100 - 1/500

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

Bovine

Species Cross Reactivity

Based on sequence similarity, is expected to react with: Rabbit, Dog, Mouse, Rat, Pig, Human

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

A bivalent human recombinant Fab selected from the HuCAL® phage display library, expressed in *E. coli*. This Fab fragment is dimerized via a helix-turn-helix motif. The antibody is tagged with a myc-tag (EQKLISEEDL) and a his-tag (HHHHHH) at the

C-terminus of the antibody heavy chain. This antibody is supplied lyophilized.

Reconstitution	Reconstitute with 1.0 ml distilled water
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Preparation	Metal chelate affinity chromatography
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Buffer Solution	Phosphate buffered saline
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Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
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Approx. Protein Concentrations	Ig concentration 0.1 mg/ml
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Immunogen	Synthetic peptide corresponding to the sequence CGKGLSATVTGGQKGRGSR of human myelin proteolipid protein 1
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External Database Links	UniProt: P60201 Related reagents Entrez Gene: 5354 PLP1 Related reagents
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Synonyms	PLP
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RRID	AB_2062235
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Specificity	<p>Human anti myelin proteolipid protein antibody, clone AbD05702 recognizes myelin proteolipid protein (PLP), which is a major constituent protein of central nervous system myelin. The Plp gene is highly conserved across species and encodes two major membrane-bound proteins of the myelin sheath, the large isoform PLP and a smaller isoform DM20. The exact functions of PLP are still unclear but reports suggest that PLP and DM20 may play a role in the formation of the intraperiod line of myelin and in maintaining axonal integrity.</p> <p>In man, mutations of the PLP and DM20 proteins have been reported which are associated with X-linked dysmyelinating disorders including the heterogeneous syndromes of Pelizaeus-Merzbacher disease (PMD). The reported mutations vary considerably and range from deletions, missense mutations to additional copies of the gene.</p>
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ELISA	Due to the presence of bovine serum albumin (BSA), this antibody is unsuitable for use as a capture reagent in sandwich ELISA applications. This product is also available without BSA, please enquire .
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References	1. Weigel, I. <i>et al.</i> (2010) Immunochemical Detection of Tissue from the Central Nervous System via Myelin Proteolipid Protein: Adaptation for Food Inspection and Development of Recombinant Bivalent Fab Mini-Antibodies. J Agric Food Chem. 58: 6587-93.
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Storage	Prior to reconstitution store at +4°C. After reconstitution store at +4°C or at -20°C if preferred. 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. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of reconstitution
Acknowledgements	Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany. His-tag is a registered trademark of EMD Biosciences.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Licensed Use	For in vitro research purposes only, unless otherwise specified in writing by Bio-Rad.
Regulatory	For research purposes only
Technical Advice	Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual

Related Products

Recommended Secondary Antibodies

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) [HRP](#)

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA1396...) [Alk. Phos.](#), [Biotin](#)

Mouse Anti Human C-MYC (MCA2200...) [Alk. Phos.](#), [Biotin](#), [HRP](#)

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