

Datasheet: MCA5641B

Description:	MOUSE ANTI LIPOPROTEIN LIPASE:Biotin
Specificity:	LIPOPROTEIN LIPASE
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	5D2
Isotype:	IgG1
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
ELISA	▪			1/50 - 1/200
Immunoprecipitation	▪			
Western Blotting	▪			

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	Reacts with: Rat, Human, Chicken, Guinea Pig Does not react with: Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG conjugated to Biotin - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml
Immunogen	Purified bovine milk lipoprotein lipase.
External Database Links	UniProt:

Entrez Gene:

[280843](#) LPL [Related reagents](#)

Specificity	Mouse anti Lipoprotein Lipase antibody, clone 5D2 recognizes an epitope within amino acids 380-410 of lipoprotein lipase (LPL), a member of the AB hydrolase superfamily, which plays a pivotal role in lipoprotein metabolism and transport, acting as the key enzyme in the hydrolysis of triglycerides and very low density lipoproteins (VLDLs), and the release of free fatty acids into peripheral tissues. A deficiency of LPL can result in hypertriglyceridemia, and many studies have focused on the critical role which LPL plays in the pathogenesis of atherosclerosis, and in particular the relationship between LPL and apolipoprotein E (ApoE), both of which are secreted in significant amounts by macrophages in developing arterial wall lesions. Mouse anti Lipoprotein Lipase antibody, clone 5D2 is a unique antibody which differentiates between monomeric inactive and dimeric active LPL, and binds to LPL sequences involved in LPL, LPL receptor, and heparin interactions. Mouse anti Lipoprotein Lipase antibody, clone 5D2 has been shown to inhibit the activity of human LPL (Chang <i>et al.</i> 1998).
ELISA	MCA5641B can be used in a direct ELISA, or as the detection reagent in a sandwich ELISA with MCA5641 or MCA5641GA as the capture antibody.
Western Blotting	MCA5641B detects a band of approximately 53kDa using partially purified LPL from postheparin plasma.
References	1. Peterson, J. <i>et al.</i> (1992) Human lipoprotein lipase: relationship of activity, heparin affinity, and conformation as studied with monoclonal antibodies. J Lipid Res. 33 (8): 1165-70. 2. Chang, S.F. <i>et al.</i> (1998) Detailed characterization of the binding site of the lipoprotein lipase-specific monoclonal antibody 5D2. J Lipid Res. 39 (12): 2350-9. 3. Hussain, M.M. <i>et al.</i> (2000) High affinity binding between lipoprotein lipase and lipoproteins involves multiple ionic and hydrophobic interactions, does not require enzyme activity, and is modulated by glycosaminoglycans. J Biol Chem. 275 (38): 29324-30.
Storage	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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

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