

Datasheet: MCA5641

BATCH NUMBER 1711

Description:	MOUSE ANTI LIPOPROTEIN LIPASE
Specificity:	LIPOPROTEIN LIPASE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	5D2
Isotype:	IgG1
Quantity:	0.2 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	▪			

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	<p>Reacts with: Rat, Human, Chicken, Guinea Pig</p> <p>Does not react with: Mouse</p> <p>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.</p>
Product Form	Purified IgG - 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 (NaN₃)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0mg/ml

Immunogen Purified bovine milk lipoprotein lipase.

External Database Links

UniProt:

[P11151](#) [Related reagents](#)

Entrez Gene:

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

RRID AB_10922752

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 *et al.* 1998](#)).

ELISA MCA5641 can be used in an indirect ELISA, or as the capture antibody in a sandwich ELISA with [MCA5641B](#) or [MCA5641P](#) as the detection reagent.

Western Blotting MCA5641 detects a band of approximately 53kDa using partially purified LPL from postheparin plasma.

References 1. Peterson, J. *et al.* (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. *et al.* (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. *et al.* (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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA5641 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M368265:200529'

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