

## Datasheet: MCA5641B

**BATCH NUMBER 173793**

<b>Description:</b>	MOUSE ANTI LIPOPROTEIN LIPASE:Biotin
<b>Specificity:</b>	LIPOPROTEIN LIPASE
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	5D2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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. 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

Purified IgG conjugated to Biotin - liquid

### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1mg/ml
<b>Immunogen</b>	Purified bovine milk lipoprotein lipase.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P11151</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">280843</a> LPL    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_10889937
<b>Specificity</b>	<p><b>Mouse anti lipoprotein lipase antibody, clone 5D2</b> 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.</p> <p>A deficiency of LPL can result in hypertriglyceridemia, and LPL plays a critical role 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.</p> <p>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 inhibits the activity of human LPL (<a href="#">Chang et al. 1998</a>).</p>
<b>ELISA</b>	MCA5641B can be used in a direct ELISA, or as the detection reagent in a sandwich ELISA with <a href="#">MCA5641</a> or <a href="#">MCA5641GA</a> as the capture antibody.
<b>Western Blotting</b>	MCA5641B detects a band of approximately 53kDa using partially purified LPL from postheparin plasma.
<b>References</b>	<ol style="list-style-type: none"> <li>Peterson, J. <i>et al.</i> (1992) Human lipoprotein lipase: relationship of activity, heparin affinity, and conformation as studied with monoclonal antibodies. <a href="#">J Lipid Res. 33 (8): 1165-70.</a></li> <li>Chang, S.F. <i>et al.</i> (1998) Detailed characterization of the binding site of the lipoprotein lipase-specific monoclonal antibody 5D2. <a href="#">J Lipid Res. 39 (12): 2350-9.</a></li> <li>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. <a href="#">J Biol Chem. 275 (38): 29324-30.</a></li> </ol>

**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA5641B>

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**Regulatory** For research purposes only

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**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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