Datasheet: MCA5641P

BATCH NUMBER 0710R

Description:	MOUSE ANTI LIPOPROTEIN LIPASE:HRP
Specificity:	LIPOPROTEIN LIPASE
Format:	HRP
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	▪			
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 Horseradish Peroxidase (HRP) - liquid

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.01% Thiomersal HRP Stabiliser (BUF052A)
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_10963722
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	MCA5641P 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	MCA5641P 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. DO NOT FREEZE. This product should be stored undiluted. 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 #10131 available at: https://www.bio-rad-antibodies.com/SDS/MCA5641P 10131
Regulatory	For research purposes only

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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

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