

Datasheet: MCA2857

Description:	MOUSE ANTI RAT C-PEPTIDE I
Specificity:	C-PEPTIDE I
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	6H1
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			▪	
Functional Assays			▪	

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	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein	IgG concentration 1.0mg/ml

Concentrations

Immunogen Fragments of rat C-peptide conjugated to a carrier protein.

External Database Links

UniProt:

[P01322](#) [Related reagents](#)

Entrez Gene:

[24505](#) Ins1 [Related reagents](#)

Synonyms Ins-1

RRID AB_2085777

Fusion Partners Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line.

Specificity **Mouse anti Rat C-Peptide I antibody, clone 6H1** recognizes rat C-peptide I. C-peptide is a 31 amino acid peptide released when proinsulin is split into insulin and C-peptide. In rats, two isoforms of proinsulin exists, the difference is two amino acid residues in the C-peptide, termed C-peptide I and C-peptide II. Proinsulin is split when it is released from the pancreas into the blood in response to a rise in serum glucose levels. C-peptide function is not fully understood, it binds to cell membranes which leads to increased intracellular Ca²⁺ concentration and subsequent stimulation of N⁺, K⁺-ATPase and endothelial nitric oxide synthase activities. C-peptide also functions in repair of the muscular layer of arteries.

Mouse anti Rat C-Peptide I antibody, clone 6H1 recognizes rat C-peptide I and rat proinsulin. It does not recognize mouse C-peptide I and reacts very weakly with rat and mouse C-peptide II.

References 1. Pasquier, A. *et al.* (2019) Lysosomal degradation of newly formed insulin granules contributes to β cell failure in diabetes. [Nat Commun. 10 \(1\): 3312.](#)

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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

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From March 15, 2021, we will no longer supply printed datasheets with our products.
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