

Datasheet: VMA00185

Description:	MOUSE ANTI PTPN1
Specificity:	PTPN1
Format:	Purified
Product Type:	PrecisionAb™ Monoclonal
Clone:	OT11B4
Isotype:	IgG2a
Quantity:	100 µl

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
Western Blotting	■			1/1000

PrecisionAb antibodies have been extensively [validated for the western blot application](#). The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Mouse monoclonal antibody purified by affinity chromatography from ascites.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 50% Glycerol
Immunogen	Full length recombinant human PTPN1 (NP_002818) produced in HEK293T cells
External Database Links	UniProt: P18031 Related reagents Entrez Gene: 5770 PTPN1 Related reagents
Synonyms	PTP1B

Specificity

Mouse anti Human PTPN1 antibody recognizes PTPN1, also known as protein tyrosine phosphatase, placental, protein-tyrosine phosphatase 1B and tyrosine-protein phosphatase non-receptor type 1.

The protein encoded by the PTPN1 gene is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotyrosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to interferon stimulation. Two transcript variants encoding different isoforms have been found for PTPN1 (provided by RefSeq, Jul 2013).

Mouse anti Human PTPN1 antibody detects a band of 50 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti PTPN1 detects a band of approximately 50 kDa in K562 cell lysates.

Instructions For Use

Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Shelf Life

As supplied, 12 months from date of despatch.

Acknowledgements

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

Health And Safety Information

Material Safety Datasheet documentation #10048 available at:
Antibody (10048): <https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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