

Datasheet: VMA00185

Description:	MOUSE ANTI PTPN1
Specificity:	PTPN1
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	OTI1B4
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

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. 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 dependent 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
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml.
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, clone OT11B4 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, clone OT11B4 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.

Storage

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

Guarantee

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:
<https://www.bio-rad-antibodies.com/SDS/VMA00185>
Antibody (10048)

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)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
'M397559:220618'

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