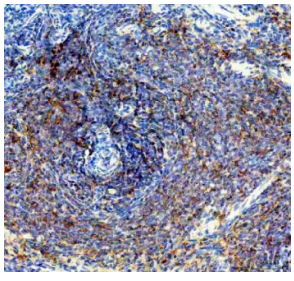
PTP1B Antibody / Protein-tyrosine phosphatase 1B / N-Terminal Region (R32849)

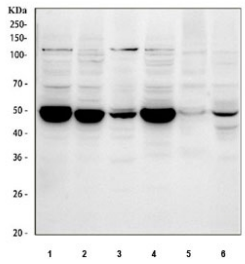
Catalog No.	Formulation	Size
R32849	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

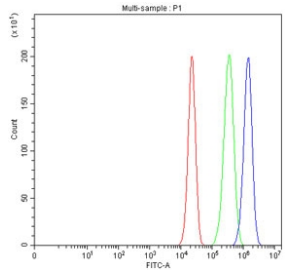
Availability	1-3 business days
Species Reactivity	Mouse, Rat, Human
Predicted Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P18031
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This PTP1B antibody is available for research use only.



IHC staining of FFPE rat spleen tissue with PTP1B antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human MCF7, 2) human Caco-2, 3) human A549, 4) human K562, 5) rat testis and 6) mouse testis tissue lysate with PTP1B antibody. Predicted molecular weight ~50 kDa.



Flow cytometry testing of fixed and permeabilized human A549 cells with PTP1B antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PTP1B antibody.

Description

Tyrosine-protein phosphatase non-receptor type 1, also known as protein-tyrosine phosphatase 1B (PTP1B), 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 phosphotryosine 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.

Application Notes

Optimal dilution of the PTP1B antibody should be determined by the researcher.

Immunogen

Amino acids 4-30 (EKEFEQIDKSGSWAAIYQDIRHEASDF) were used as the immunogen for the PTP1B antibody.

Storage

After reconstitution, the PTP1B antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
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