

## Product Information

**MemDX™ Membrane Protein Human PTPRB (Protein tyrosine phosphatase receptor type B)**  
**Expressed in Yeast with 6xHis tag at the N-terminus for Antibody Discovery, Partial (1643-1997aa)**

Cat. No.: **MPX4343K**

This product is for research use only and is not intended for diagnostic use.

This product is a 43.4kDa Human PTPRB membrane protein expressed in Yeast. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

PTPRB

#### Protein Length

Partial (1643-1997aa)

#### Protein Class

Protein phosphatase

#### Molecular Weight

43.4kDa

#### TMD

1

#### Sequence

RQKVSHGRERPSARLSIRDRPLSVHLNLGQKGNRKTSCTPIKINQFEGHFMKLQADSNYLLSKEYEELKDVGRNQSCDIALLPENR

### Product Description

#### Expression Systems

Yeast

#### Tag

6xHis tag at the N-terminus

#### Protein Format

Soluble

**Form**

Liquid or Lyophilized powder

**Purity**

>90% as determined by SDS-PAGE

**Buffer**

Tris-based buffer, 50% glycerol

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

PTPRB

**Full Name**

Protein tyrosine phosphatase receptor type B

**Introduction**

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. 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 contains an extracellular domain, a single transmembrane segment and one intracytoplasmic catalytic domain, thus belongs to receptor type PTP. The extracellular region of this PTP is composed of multiple fibronectin type\_III repeats, which was shown to interact with neuronal receptor and cell adhesion molecules, such as contactin and tenascin C. This protein was also found to interact with sodium channels, and thus may regulate sodium channels by altering tyrosine phosphorylation status. The functions of the interaction partners of this protein implicate the roles of this PTP in cell adhesion, neurite growth, and neuronal differentiation. Alternate transcript variants encoding different isoforms have been found for this gene.

**Alternative Names**

PTPRB; PTPB; HPTPB; VEPTP; HPTP-BETA; R-PTP-BETA; receptor-type tyrosine-protein phosphatase beta; VE-PTP; protein tyrosine phosphatase, receptor type, beta polypeptide; vascular endothelial protein tyrosine phosphatase; Protein tyrosine phosphatase receptor type B

**Gene ID**

[5787](#)

**UniProt ID**

[P23467](#)