Protein Tyrosine Phosphatase 1B, human recombinant, expressed in *E. coli*

Catalog Number P6244
Storage Temperature –70 °C

**Synonym:** PTP-1B

**Product Description**
Protein Tyrosine Phosphatase 1B (PTP-1B) is a recombinant, prototype non-transmembrane protein expressed in *E. coli* containing amino acid residues 1–322 of human PTP-1B. It has a molecular mass of 37.4 kDa.1,2

Phosphorylation is a reversible mechanism in which proteins can be functionally controlled. PTP1B is an abundant intracellular enzyme that is thought to act as a negative regulator of certain signaling pathways.1 This enzyme dephosphorylates tyrosine-phosphorylated proteins and peptides, and is usually localized in the cytosolic domain of the ER.3

The product is supplied as a solution in 50 mM HEPES, pH 7.2, 1 mM EDTA, 5 mM DTT, and 0.05% NP-40.

Purity: ≥90% (SDS-PAGE)

Specific activity: ≥30 units/mg protein

Unit definition: One unit will hydrolyze 1 µmole of a phosphopeptide substrate, EGFR fragment 988–998, per minute at pH 7.2 at 30 °C.

**Precautions and Disclaimer**
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

**Storage/Stability**
This product ships on dry ice and it is recommended to store the product at –70 °C. PTP-1B remains active for at least 1 year at –70 °C from date of shipment. For maximum recovery of product, centrifuge the vial briefly prior to removing the cap. Avoid freeze thaw cycles.

**References**