Protein Tyrosine Phosphatase 1B
Human, Recombinant
Expressed in E. coli

Product Number P 7365
Storage Temperature –20 °C

Product Description
Protein Tyrosine Phosphatase 1B (PTP-1B) is a recombinant glutathione S-transferase/PTP-1B fusion protein expressed in E. coli that contains full-length (76kDa) human PTP-1B.1,2 It is purified by affinity chromatography on glutathione-agarose beads.

Phosphorylation is a reversible mechanism in which proteins can be functionally controlled. PTP-1B is a serine non-transmembrane protein tyrosine phosphatase and is tightly associated with microsomal membranes, with its phosphatase domain oriented towards the cytoplasm. This enzyme dephosphorylates tyrosine-phosphorylated proteins and peptides and is usually localized in the cytoplasmic domain of the ER1.

The GST-PTP-1B fusion protein appears on Coomassie-stained SDS gel as multiple bands between 62 and 68 kDa, respectively. These peptides represent 97% of the protein.

This product is supplied as a solution containing Tris Buffered Saline (TBS), pH 7.4, 25 mM glutathione, 5 mM dithiothreitol, and 50% glycerol.

Unit definition
One unit will hydrolyze 1 nanomole of p-nitrophenylphosphate per minute at pH 7.2 at 37 °C.

Precautions and Disclaimer
This product is for laboratory research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
PTP-1B is stable for at least 1 year at –20 °C from date of shipment. For maximum recovery of product, centrifuge the vial briefly prior to removing the cap. Avoid freeze thaw cycles.

References