



Echelon Biosciences Inc.
675 Arapeen Drive, Suite 302
Salt Lake City, UT 84108
Telephone 866-588-0455
Fax 801-588-0497
echelon@echelon-inc.com
www.echelon-inc.com

Technical Data Sheet

For research use only

Not intended or approved for
diagnostic or therapeutic use.

PTB1Bfl, active

(Recombinant human protein expressed in *E. coli*)

Catalog # **E-P004**
Size: 20 µg
Specific activity: 20,000 U/mg

Product Description

PTP1B/PTPN1 is protein tyrosine phosphatase, non-receptor type 1. Recombinant human full length (amino acids 1-436) of PTP1B with N-terminal GST tag was expressed in an *E. coli* expression system. The GenBank Accession number is M31724. MW = 71 kDa.

Specific Activity

20,000 U/mg. 1 unit of PTP1Bfl activity is equal to 1 nmol phosphate hydrolyzed from p-nitrophenyl phosphate substrate per minute at pH 7.4 and 30 °C.

Assay Condition

50 mM HEPES, pH 7.4, 2 mM EDTA, 3 mM DTT, 100 mM NaCl, 50 mM pNPP substrate, and 2 µg/ml recombinant PTP1Bfl.

Purity

> 95% by SDS-PAGE.

Formulation

Recombinant protein is in storage buffer (25 mM Tris-HCl, pH 8.0, 75 mM NaCl, 0.05% Tween-20, 2 mM EDTA, 3 mM DTT, and 50% glycerol).

Storage and Stability

Store product frozen at or below -70 °C. Enzyme will be stable for at least 6 months at -70 °C as undiluted stock. Freeze in working aliquots to avoid repeated thawing and freezing.

Application

PTP1Bfl is useful for the study of enzyme kinetics, regulation, target substrate dephosphorylation, and inhibitor screening.

References

1. Frangioni, J.V. *et al.* (1992) *Cell* **68**: 545-60
2. Elchebly, M. *et al.* (1999) *Science* **283**: 1544-8