



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.

PRL-2/ PTP4A2, active

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

Catalog # **E-P002**
Size: 10 µg
Specific activity: 1 U/mg

Product Description

PRL-2/PTP4A2 (phosphatase of regenerating liver-2/protein tyrosine phosphatase type IVA, member 2) is a non-receptor protein tyrosine phosphatase. Recombinant human catalytic domain (amino acids 2-167) of PRL-2 with N-terminal GST tag was expressed in an *E. coli* expression system. The GenBank Accession number is NM_080391. MW = 45 kDa.

Specific Activity

1 U/mg. 1 unit of PRL-2 activity is equal to 1 nmol phosphate hydrolyzed from 6, 8-difluoro-4-methyl umbelliferyl phosphate (DiFMUP) substrate per minute at pH 6.3 and 30 °C.

Assay Condition

50 mM Bis-Tris, pH 6.3, 2 mM EDTA, 2 mM DTT, 100 mM DiFMUP, and 50 µg/ml recombinant enzyme PRL-2.

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, 3 mM DTT, 2 mM EDTA, 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

PRL-2 is useful for the study of enzyme kinetics, regulation, target substrate dephosphorylation, and inhibitor screening.

Reference

Shi, X. *et al.* (2001) *J. Biol. Chem.* **276**: 32875-82.