LAR/PTPRF - N Terminal GST Tag. E.coli Active Enzyme

Protein tyrosine phosphatase receptor type F-polypeptide-interacting protein alpha-1, PTPRF-interacting protein alpha-1, LIP.1, LAR

Background

May regulate the disassembly of focal adhesions. May localize receptor-like tyrosine phosphatases type 2A at specific sites on the plasma membrane, possibly regulating their interaction with the extracellular environment and their association with substrates.

Activity

Useful for the study of enzyme kinetics, regulation, and to dephosphorylate target substrates. Specific Activity: 0.7 U/ug. One unit will hydrolyze 1 nmol p-nitrophenyl phosphate per minute at pH 7.4 and 37°C. Assay buffer: 50 mM HEPES, pH 7.4, 2 mM EDTA, 3 mM DTT, and 100 mM NaCl. Enzyme reaction condition: 50 mM HEPES, pH 7.4, 2

Purity

> 95% by SDS-PAGE

Applications

Ordering Information

Catalog Number
X1771E

Size
20 µg

Customer Storage
Product should be stored at -80°C. Aliquot to avoid freeze/thaw cycles

Formulation
25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, and 3 mM DTT.

Ship Conditions

Stability
Stable for > 6 months when stored as recommended.

Concentration
See vial for concentration

Source
Human transmembrane leukocyte antigen related PTPCatalytic domain, (a.a.1330-1620) (Gene bank accession number NM_130440) with Nterminal GST tag, MW=58 kDa, expressed in an E.coli

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Assay Methods

Materials

Assay buffer: 50 mM HEPES, pH 7.4, 100 Mm NaCl, 2 mM EDTA, 3 mM DTT.

Prepare 5 X pNPP substrate (10 mM) in the assay buffer

Enzyme preparation: LAR (0.1 mg/ml)

Procedure

1. Prepare reaction mixtures in a 96-well plate (keep on ice). Add in the order:

   60 μl of assay buffer

   20 μl of 10 mM pNPP in buffer (final conc. 2 mM)

   10 μl 1% BSA

   10 μl of 0.1 mg/ml LAR enzyme in the assay buffer

   Mix well and start the reaction at 30 °C water bath, and incubate for 10 min.

2. Add 100 μl per well of 2 M K2CO3 to stop the reaction.

3. Read absorbance at 405 nm using a plate reader.

References

1.H. Cho et al. Biochemistry 1991, 30: 6210-6216

2.H. Cho et al. Biochemistry 1992, 31: 133-138

Product Specific References

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