



Protein Tyrosine Phosphatase PTPRE (1st Catalytic Domain)

Human, recombinant protein expressed in *E. coli*, Active
Cat# CY-E1308

Amount: 50µg (0.21µg/µl)
Lot:

Introduction:

PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. Two alternatively spliced transcript variants of PTPRE gene have been reported, one of which encodes a receptor-type PTP that possesses a short extracellular domain, a single transmembrane region, and two tandem intracytoplasmic protein tyrosine phosphatase (PTPase) domains; Another one encodes a PTP that contains a distinct hydrophilic N-terminus, and thus represents a nonreceptor-type isoform. PTPRE has been shown to interact with KCNB1

Product Description:

1st PTPase domain of human PTPRE, containing 161-393 a.a. (receptor type isoform, NP_006495), and an N-terminal GST tag, expressed in *E. coli*. and purified by GSH agarose chromatography.

Gene Information:

The gene/protein (receptor type isoform) accession number is NM_006504/NP_006495.

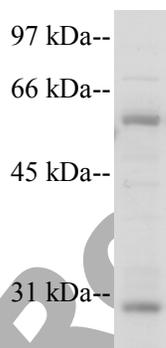
Gene Aliases:

Protein tyrosine phosphatase receptor type E, HPTPE, R-PTP-EPSILON

Formulation:

The recombinant protein is supplied frozen in a buffer containing 100mM NaCl, 20mM Tris-HCl (pH 7.0), 1mM DTT, 1mM EDTA and 50% glycerol. Use a same buffer for dilution when needed.

Molecular Weight:



Coomassie blue stain

Recombinant PTPRE (1st PTPase Domain) demonstrates approximately 58 kDa band by SDS-PAGE analysis.



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Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

Specific Activity:

23.3 units/ μ g. This unit value is determined at the point of production and may vary with time and various conditions. Specific Activity also varies among production lots.

Unit Definitions:

One unit is defined as the amount of phosphatase required to release 1 pmol of phosphate from CycLex's PTP substrate-1 per minute at 30°C.

Storage:

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, AVOID REPEATED HANDLING AND MULTIPLE FREEZE/THAW CYCLES.

Stability:

Unopened vial at -70 °C, for 1 year after delivery.

References:

1. van den Maagdenberg AM, van den Hurk HH, Weghuis D, Wieringa B, Geurts van Kessel A, Hendriks WJ. "Assignment of the human protein tyrosine phosphatase epsilon (PTPRE) gene to chromosome 10q26 by fluorescence in situ hybridization". *Genomics* 30 (1): 128–9, 1996.
2. Peretz, A, Gil-Henn H, Sobko A, Shinder V, Attali B, Elson A. "Hypomyelination and increased activity of voltage-gated K(+) channels in mice lacking protein tyrosine phosphatase epsilon". *EMBO J.* 19 (15): 4036–45, 2000.

PRODUCED BY

CycLex Co., Ltd.

1063-103 Terasawaoka

Ina, Nagano 396-0002

Japan

Fax: +81-265-76-7618

e-mail: info@cyclex.co.jp

URL: <http://www.cyclex.co.jp>

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