



Protein Tyrosine Phosphatase PTPRK (1st Catalytic Domain)

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

Protein Tyrosine Phosphatase PTPRK (1st Catalytic Domain)

Human, recombinant protein expressed in *E. coli.*, Active
Cat# CY-E1316

Amount: 50µg (0.35µg/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. PTPRK possesses an extracellular region, a single transmembrane region, and two tandem intracytoplasmic protein tyrosine phosphatase (PTPase) domains, and thus represents a receptor-type PTP. The extracellular region contains a meprin-A5 antigen-PTP mu (MAM) domain, an Ig-like domain and four fibronectin type III-like repeats. PTPRK was shown to mediate homophilic intercellular interaction, possibly through the interaction with beta- and gamma-catenin at adherens junctions.

Product Description:

1st PTPase domain of human PTPRK, containing 914-1441 a.a., and an N-terminal GST tag, expressed in *E. coli.* and purified by GSH agarose chromatography.

Gene Information:

The gene/protein accession number is NM_002844/NP_002835.

Gene Aliases:

Protein tyrosine phosphatase receptor type K, R-PTP-kappa

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:

97 kDa--
66 kDa--
45 kDa--
31 kDa--

Coomassie blue stain

Recombinant PTPRK (1st PTPase Domain) demonstrates approximately 57 kDa band by SDS-PAGE analysis.



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Specific Activity:

97.07 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. Yang Y, Gil MC, Choi EY, Park SH, Pyun KH, Ha H (Mar 1997). "Molecular cloning and chromosomal localization of a human gene homologous to the murine R-PTP-kappa, a receptor-type protein tyrosine phosphatase". *Gene* 186 (1): 77-82, 1997.
2. Fuchs M, Muller T, Lerch MM, Ullrich A. "Association of human protein-tyrosine phosphatase kappa with members of the armadillo family". *J Biol Chem* 271 (28): 16712-9, 1996.

PRODUCED BY

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