

Recombinant human CD45 protein

Catalog Number: ATGP2577

PRODUCT INFORMATION

Expression system

E.coli

Domain

1031-1251aa

UniProt No.

P08575

NCBI Accession No.

NP_002829.3

Alternative Names

Protein tyrosine phosphatase receptor type isoform 1, Protein tyrosine phosphatase, receptor type, isoform 1, LCA, LY5, B220, CD45, T200, GP180

PRODUCT SPECIFICATION

Molecular Weight

29.6 kDa (257aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

PTPRC, also known as CD45, is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and

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two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Recombinant human PTPRC protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

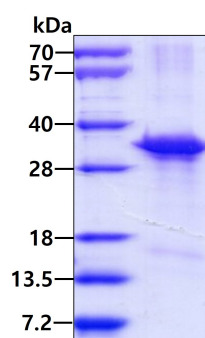
<MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGS>VMIA AQGPLKETIG DFWQMIFQRK VKVIVMLTEL
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KQKLPQKNSS EGNKHHKSTP LLIHCRDGSQ QTGIFCALLN LLESAETEEV VDIFQVVKAL RKARPGMVST FEQYQFLYDV
IASTYPAQNG QVKKNHMQED KIEFDNE

General References

Charbonneau H., et al. (1988) Proc. Natl. Acad. Sci. u.S.A. 85:7182-7186
Wu L., et al. (2002) Mol. Cell. Biol. 22:2673-2686

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.