





Recombinant Human Receptor-type tyrosineprotein phosphatase C (PTPRC), Partial

Product Code	CSB-EP019049HU
Relevance	Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor. Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity
Abbreviation	Recombinant Human PTPRC protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P08575
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QSPTPSPTGLTTAKMPSVPLSSDPLPTHTTAFSPASTFERENDFSETTTSLSPD NTSTQVSPDSLDNASAFNTTGVSSVQTPHLPTHADSQTPSAGTDTQTFSGSA ANAKLNPTPGSNAISDVPGERSTASTFPTDPVSPLTTTLSLAHHSSAALPARTS NTTITANTSDAYLNASETTTLSPSGSAVISTTTIATTPSKPTCDEKYANITVDYLY NKETKLFTAKLNVNENVECGNNTCTNNEVHNLTECKNASVSISHNSCTAPDKT LILDVPPGVEKFQLHDCTQVEKADTTICLKWKNIETFTCDTQNITYRFQCGNMIF DNKEIKLENLEPEHEYKCDSEILYNNHKFTNASKIIKTDFGSPGEPQIIFCRSEAA HQGVITWNPPQRSFHNFTLCYIKETEKDCLNLDKNLIKYDLQNLKPYTKYVLSL HAYIIAKVQRNGSAAMCHFTTKSAPPSQVWNMTVSMTSDNSMHVKCRPPRD RNGPHERYHLEVEAGNTLVRNESHKNCDFRVKDLQYSTDYTFKAYFHNGDYP GEPFILHHSTSYNSK
Research Area	Immunology
Source	E.coli
Target Names	PTPRC
Protein Names	Recommended name: Receptor-type tyrosine-protein phosphatase C EC= 3.1.3.48Alternative name(s): Leukocyte common antigen Short name= L-CA T200 CD_antigen= CD45
Expression Region	26-577aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged









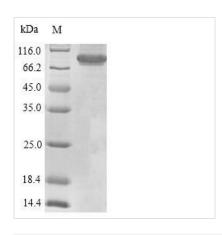
Mol. Weight

76.8kDa

Protein Length

Extracellular Domain

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

E.coli-expressed receptor-type tyrosine-protein phosphatase C (PTPRC)CSB-EP019049HU is a recombinant fusion protein of partial PTPRC coupled to a 6xHis-SUMO at the N-terminus. This protein consists of the extracellular domain (24-575aa) of human PTPRC and has a calculated molecular weight of 76.8 kDa. The SDS-PAGE showed an about 90 kDa molecular mass of this protein and determined the purity of over 90%. In-stock PTPRC proteins are offered now. In addition to producing specific antibodies, this recombinant PTPRC protein may be used in the PTPRC-related immunology.

PTPRC, also called CD45, is a receptor protein tyrosine phosphatase expressed on all hematopoietic cells except platelets and erythrocytes. It functions as a key regulator of T and B cell signaling. Adam H. Courtney etc. revealed that CD45 modulates T cell activation by serving as a signaling "gatekeeper," enabling graded signaling while filtering out weak, spurious, or toxic signaling events.

Shelf Life

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