

Product datasheet for SC333434

OriGene Technologies, Inc.

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CD45 (PTPRC) (NM_001267798) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD45 (PTPRC) (NM_001267798) Human Untagged Clone

Tag: Tag Free Symbol: CD45

Synonyms: B220; CD45; CD45R; GP180; L-CA; LCA; LY5; T200

Mammalian Cell

Neomycin

Selection:

Vector: PCMV6-Neo

E. coli Selection: Ampicillin (100 ug/mL)

Restriction Sites: Sgfl-Mlul

ACCN: NM_001267798

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: NM 001267798.1, NP 001254727.1

RefSeq Size: 1477 bp





CD45 (PTPRC) (NM_001267798) Human Untagged Clone - SC333434

RefSeq ORF: 264 bp Locus ID: 5788

Cytogenetics: 1q31.3-q32.1

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Phosphatase, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs), Fc gamma R-mediated phagocytosis, Primary

immunodeficiency, T cell receptor signaling pathway

Gene Summary: The protein encoded by this gene 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 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. Alternatively spliced transcripts variants of this gene, which encode

distinct isoforms, have been reported. [provided by RefSeq, Jun 2012]

Transcript Variant: This variant (5) differs in the 3' coding region and 3' UTR, compared to variant 1. The resulting isoform (5) has a distinct C-terminus and is shorter than isoform 1.