

Product datasheet for **SC128007**

CD45 (PTPRC) (NM_080921) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD45 (PTPRC) (NM_080921) Human Untagged Clone
Tag:	Tag Free
Symbol:	CD45
Synonyms:	B220; CD45; CD45R; GP180; L-CA; LCA; LY5; T200
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC128007 sequence for NM_080921 edited (data generated by NextGen Sequencing)

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ATGTATTTGTGGCTTAACTCTTGGCATTGGCTTTGCCTTTCTGGACACAGAAGTATTT
GTGACAGGGCAAAGCCCAACACCTTCCCCACTGATGCCTACCTTAATGCCTCTGAAACA
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TTCAGCAAGTTTCTATAAAGGAAGCTCGAAAGCCCTTTAACCAGAATAAAAACCGTTAT
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ACGAGTGGCACTGAGGGCCAGAACATTCTGTCAATGGTCTGCAAGTCCAGCTTTAAAT
CAAGGTTCATAG

Clone variation with respect to NM_080921.2
1827 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_080921 unedited
 NTTTGCGNATTTTGTAAACGACTCACTTATAGGGCGGCCGGAATTCGCACGAGGTCT
 GATAAGACAACAGTGGAGAAAGGACGCATGCTGTTTCTTAGGGACACGGCTGACTTCCAG
 ATATGACCATGTATTTGTGGCTTAACTCTTGCCATTTGGCTTTGCCTTCTGGACACAG
 AAGTATTTGTGACAGGGCAAAGCCCAACACCTTCCCCACTGATGCCTACCTTAATGCCT
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 CAGGGGTTGAAAAGTTTCAGTTACATGATTGTACACAAGTTGAAAAGCAGATACTACTA
 TTTGTTTAAAATGAAAAATATTGAAACCTTTACTTGTGATACACAGAATATTACCTACA
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 CCGAACATGAGTATAAGTGTGACTCAGAAATACTCTATAATAACCACAAGTTTACTTAAC
 GCAAGTAAATTATTAACAGATTTTGGGAGTCCAGGAGAGCCTCAGATATTTTTGTAG
 AAAGTGAGCTGCACATCAAGGAGTAATTACCTGGAATCCCTCAAAGACATTTTCATAATT
 TACCCTCTGTATATAAGAGACAGAAAAGATGCCTCATCTGA

3' Read Nucleotide Sequence:

>Forward primer walk for NM_080921 unedited
 AAAAAAGCTCCTAAGACGTGNGCTTTTNCCTTTGTTTTATGNAGNAAAAAACATTTTAT
 ATTAGAAGTGTTAACTTACGTTGAAGGATCTGTTTTTAAATCATAACTGTGTGCAGAC
 TCAATGAAATCATGTGCACTTTCTGAAATGACTGAAGGAGTCTCCATCGGCCGCCCC
 GAAAGTAGCCCGGGCGCGCGGGGGGGCCGAGGCCGGGCTGGGCCCGTGCGGGGC
 CGCCGGGCCCCGGCCGCGCGCCGCTGGTCCCCCGGGCTCGGCCGCCAGCACGCCGG
 CCCCCCACCGCCGACCGAGCTCCGGGGGGCCCCGCCAGCGGCCGAGGGGGCGG
 TGGTCAACGGCGGAACGCGGGCCCCCGCCGGCGCTCGCGGGCGGTCCGCCGGCCCCG
 CCGGGTTGCTGGGGCCGCCCGGGGGCCAACTCGCCCCGCCCGCGGGTGC
 CCCCCGTGTTCCGGCGCGAGCCGGTGGCGGGGGCGCGCCCGCCAGTAGCCGCCGCC
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 CTGCTGGCCGGATCGCCGGCCGGATCGCGCGCGCTGATCGCCCCCGCGCGCCCC
 CGTGTTCCCCCCCCCGCCACGCCGTGCCCGCGCGCGCGCCCCGAGATTGCTCC
 GGCCGGTGACCCCGCGCGCGCGGGCGGTATGACACCCACGGCGCCCCCGGCCG
 GGGGTGTGCGACCGCGGGTGTGGCGCCCCCGCGCTGAGGCCGCCCGCCCCGCGAG
 CCGCGCAACGCCCGCCCGCGGGTCCCCGCGGGGTGCCCGGTACGCCCGCG
 CGCGCGCGCGCGCAAG

Restriction Sites:

NotI-NotI

ACCN:

NM_080921

Insert Size:

4700 bp

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:	<ol style="list-style-type: none">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.
RefSeq:	NM_080921.1 , NP_563578.1
RefSeq Size:	4543 bp
RefSeq ORF:	3432 bp
Locus ID:	5788
UniProt ID:	P08575
Cytogenetics:	1q31.3-q32.1
Domains:	Y_phosphatase, FN3
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:	<p>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]</p> <p>Transcript Variant: This variant (2) lacks three in-frame exons in the 5' coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1.</p>