

## Product datasheet for RC216590L4

#### OriGene Technologies, Inc.

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## CD45 (PTPRC) (NM\_002838) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: CD45 (PTPRC) (NM\_002838) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: CD45

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

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC216590).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM\_002838

ORF Size: 3918 bp



### CD45 (PTPRC) (NM\_002838) Human Tagged Lenti ORF Clone - RC216590L4

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**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.

**RefSeq:** <u>NM 002838.3</u>

 RefSeq Size:
 5026 bp

 RefSeq ORF:
 3921 bp

 Locus ID:
 5788

 UniProt ID:
 P08575

**Cytogenetics:** 1q31.3-q32.1

**Domains:** Y phosphatase, PTPc motif, 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

MW: 147.3 kDa

**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 sell growth, differentiation, mitosic, and appropriate transformation. This PTP

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

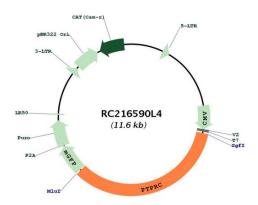
been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine

receptor signaling. Alternatively spliced transcripts variants of this gene, which encode

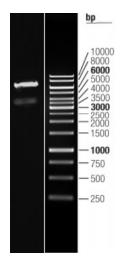
distinct isoforms, have been reported. [provided by RefSeq, Jun 2012]



# **Product images:**



Circular map for RC216590L4



Double digestion of RC216590L4 using Sgfl and Mlul