

Product datasheet for **RG235540**

CD45 (PTPRC) (NM_001267798) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CD45 (PTPRC) (NM_001267798) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PTPRC
Synonyms: B220; CD45; CD45R; GP180; L-CA; LCA; LY5; T200
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG235540 representing NM_001267798.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGACCATGTATTTGTGGCTTAAACTCTTGGCATTGGCTTTGCCTTCTGGACACAGAAGTATTTGTG
ACAGGGCAAAGCCCAACACCTTCCCCACTGGCCATCTGCAAGCTGAGGAGCAAGGAAGCCAATCCAAG
TCACCAAACCTCAAAGTAGGGAAGCTGACAGTTCAGCCTTCAGTTGGTGGCCAAAGGCCCGAGAGCCC
CTCACAAACCACTGGAGTAAGTCCAAGAGTCCAAAGCTGAGGAAGTGGAGTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG235540
Blue=ORF Red=Cloning site Green=Tag(s)

```
MTMYLWLKLLAFGFAFLDTEVFVTGQSPTPSPTGHLQAEEQGSQSKSPNLKSREADSSAFSWPKAREP
LTNHWSKSKSPKAEELGV
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

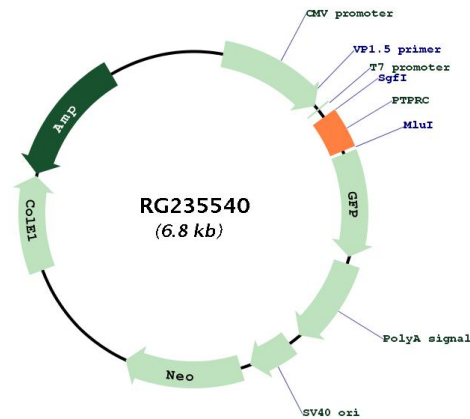
Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:

Cloning sites used for ORF Shutting:


Plasmid Map:

ACCN: NM_001267798

ORF Size: 261 bp

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).
RefSeq:	NM_001267798.2
RefSeq Size:	1477 bp
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
MW:	10.2 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 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]