

Product datasheet for RC220949

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PR3 (PRTN3) (NM_002777) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PR3 (PRTN3) (NM_002777) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: PR3

Synonyms: ACPA; AGP7; C-ANCA; CANCA; MBN; MBT; NP-4; NP4; P29; PR-3; PR3

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC220949 representing NM_002777

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



PR3 (PRTN3) (NM_002777) Human Tagged ORF Clone - RC220949

Protein Sequence: >RC220949 representing NM_002777

Red=Cloning site Green=Tags(s)

MAHRPPSPALASVLLALLLSGAARAAEIVGGHEAQPHSRPYMASLQMRGNPGSHFCGGTLIHPSFVLTAA HCLRDIPQRLVNVVLGAHNVRTQEPTQQHFSVAQVFLNNYDAENKLNDILLIQLSSPANLSASVATVQLP QQDQPVPHGTQCLAMGWGRVGAHDPPAQVLQELNVTVVTFFCRPHNICTFVPRRKAGICFGDSGGPLICD GIIQGIDSFVIWGCATRLFPDFFTRVALYVDWIRSTLRRVEAKGRP

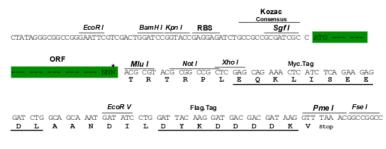
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6124 c01.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_002777

ORF Size: 768 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).



Domains:

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 002777.4</u>

 RefSeq Size:
 1001 bp

 RefSeq ORF:
 771 bp

 Locus ID:
 5657

 UniProt ID:
 P24158

 Cytogenetics:
 19p13.3

Protein Families: Druggable Genome, Protease

Tryp_SPc

MW: 27.6 kDa

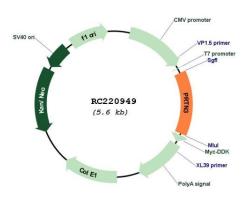
Gene Summary: Serine protease that degrades elastin, fibronectin, laminin, vitronectin, and collagen types I,

III, and IV (in vitro) (PubMed:3198760, PubMed:2033050, PubMed:28240246). By cleaving and activating receptor F2RL1/PAR-2, enhances endothelial cell barrier function and thus vascular integrity during neutrophil transendothelial migration (PubMed:23202369). May play a role in

neutrophil transendothelial migration, probably when associated with CD177

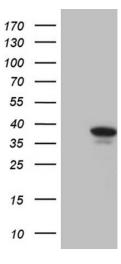
(PubMed:22266279).[UniProtKB/Swiss-Prot Function]

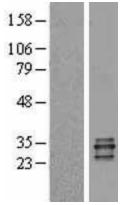
Product images:

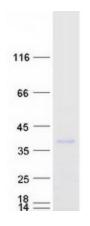


Circular map for RC220949









HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PRTN3 (Cat# RC220949, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PRTN3 (Cat# [TA807348])(1:500). Positive lysates [LY400985] (100ug) and [LC400985] (20ug) can be purchased separately from OriGene.

Western blot validation of overexpression lysate (Cat# [LY400985]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220949 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified PRTN3 protein (Cat# [TP320949]). The protein was produced from HEK293T cells transfected with PRTN3 cDNA clone (Cat# RC220949) using MegaTran 2.0 (Cat# [TT210002]).