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Product datasheet for RC220949

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 Sequence:

>RC220949 representing NM_002777
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCACCGGCCCCCCAGCCCTGCCCTGGCGTCCGTGCTGCTGGCCTTGCTGCTGAGCGGTGCTGCCC
GAGCTGCGGAGATCGTGGGCGGGCACGAGGCGCAGCCACACTCCCGGCCCTACATGGCCTCCCTGCAGAT
GCGGGGGAACCCGGGCAGCCACTTCTGCGGAGGCACCTTGATCCACCCCAGCTTCGTGCTGACGGCCGCG
CACTGCCTGCGGGACATACCCCAGCGCCTGGTGAACGTGGTGCTCGGAGCCCACAACGTGCGGACGCAGG
AGCCCACCCAGCAGCACTTCTCGGTGGCTCAGGTGTTTCTGAACAACTACGACGCGGAGAACAAACTGAA
CGACATTCTCCTCATCCAGCTGAGCAGCCCAGCCAACCTCAGTGCCTCCGTCGCCACAGTCCAGCTGCCA
CAGCAGGACCAGCCAGTGCCCCACGGCACCCAGTGCCTGGCCATGGGCTGGGGCCGCGTGGGTGCCCACG
ACCCCCCAGCCCAGGTCCTGCAGGAGCTCAATGTCACCGTGGTCACCTTCTTCTGCCGGCCACATAACAT
TTGCACTTTCGTCCCTCGCCGCAAGGCCGGCATCTGCTTCGGAGACTCAGGTGGCCCCCTGATCTGTGAT
GGCATCATCCAAGGAATAGACTCCTTCGTGATCTGGGGATGTGCCACCCGCCTTTTCCCTGACTTCTTCA
CGCGGGTAGCCCTCTACGTGGACTGGATCCGTTCCACGCTGCGCCGTGTGGAGGCCAAGGGCCGCCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC220949 representing NM_002777
Red=Cloning site Green=Tags(s)

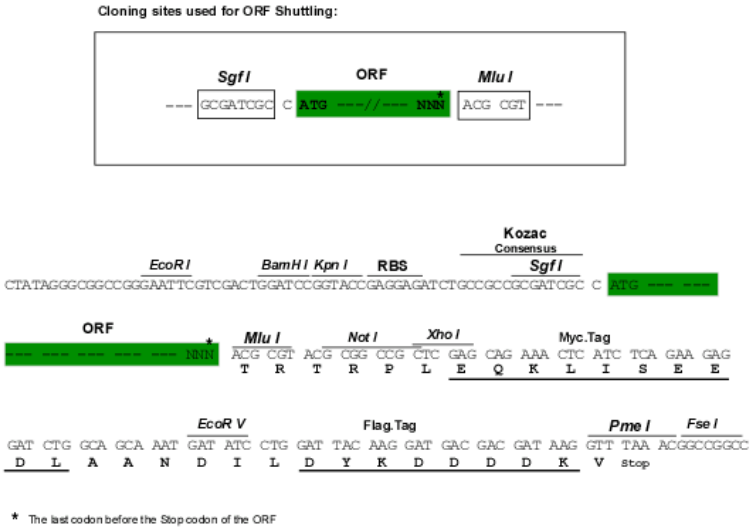
MAHRPPSPALASVLLALLLSGAARAAEIVGGHEAQPHSRPYMASLQMRGNPGSHFCGGTLIHPSFVLTAA
HCLRDIPQRLVNVVLGAHNVRTQEPTQQHFSVAQVFLNNYDAENKLNDILLIQLSSPANLSASVATVQLP
QQDQPVPHGTQCLAMGWGRVGAHDPPAQVLQELNVTVVTFFCRPHNICTFVPRRKAGICFGDSGGPLICD
GIIQGIDSFVIWGCATRLFPDFFTRVALYVDWIRSTLRRVEAKGRP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6124_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002777

ORF Size: 768 bp

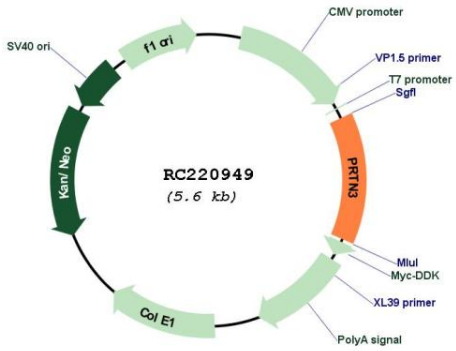
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

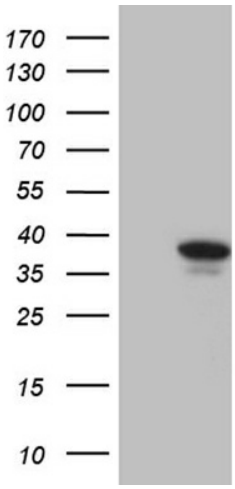
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_002777.4
RefSeq Size:	1001 bp
RefSeq ORF:	771 bp
Locus ID:	5657
UniProt ID:	P24158
Cytogenetics:	19p13.3
Domains:	Tryp_SPc
Protein Families:	Druggable Genome, Protease
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]

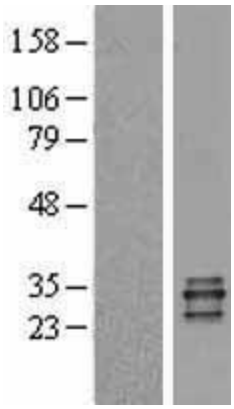
Product images:



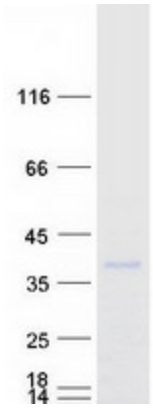
Circular map for RC220949



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 un-transfected 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]).