

Product datasheet for RC217269

C Reactive Protein (CRP) (NM_000567) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C Reactive Protein (CRP) (NM_000567) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C Reactive Protein
Synonyms:	PTX1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217269 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAAGCTGTTGTGTTTCTTGGTCTTGACCAGCCTCTCTCATGCTTTTGGCCAGACAGACATGTCTGA
GGAAGGCTTTTGTGTTCCCAAAGAGTCGGATACTTCTATGTATCCCTCAAAGCACCGTTAACGAAGCC
TCTCAAAGCCTTCACTGTGTGCCTCCACTTCTACACGGAAGTCTCCTCGACCCGTGGGTACAGTATTTTC
TCGTATGCCACCAAGAGACAAGACAATGAGATTCTCATATTTGGTCTAAGGATATAGGATACAGTTTTTA
CAGTGGGTGGGTCTGAAATATTATTCGAGGTTCTGAAGTCACAGTAGCTCCAGTACACATTTGTACAAG
CTGGGAGTCCGCCTCAGGATCGTGGAGTCTGGGTAGATGGGAAGCCAGGGTGAGGAAGAGTCTGAAG
AAGGGATACACTGTGGGGCAGAAGCAAGCATCATCTTGGGGCAGGAGCAGGATTCCTTCGGTGGGAACT
TTGAAGGAAGCCAGTCCCTGGTGGGAGACATTGGAAATGTGAACATGTGGGACTTTGTGCTGTACCAGA
TGAGATTAACACCATCTATCTTGGCGGGCCCTCAGTCTAATGTCCTGAACTGGCGGGCACTGAAGTAT
GAAGTGAAGGCGAAGTGTTCACCAAACCCAGCTGTGGCCC

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC217269 protein sequence
Red=Cloning site Green=Tags(s)

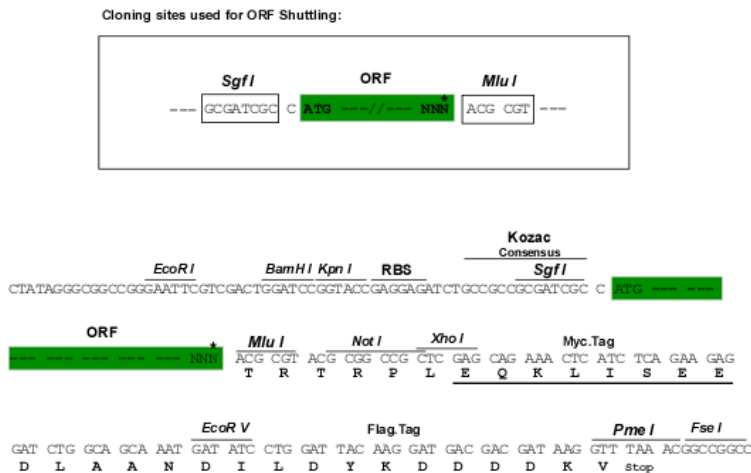
MEKLLCFLVLTSLSHAFGQTDMRKAFFVPKESDTSYVSLKAPLTKPLKAFVCLHFYTELSSTRGYSIF
 SYATKRQDNEILIFWSKIDIGYSFTVGGSEILFEVPEVTVAPVHICTSWESASGIVEFVWDGKPRVRKSLK
 KGYTVGAEASIIILGQEQDSFGNFEGSQSLVGDIGNVNMWDFVLSPDEINTIYLGPFSPNVLNWRALKY
 EVQGEVFTKPLWP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6442_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_000567

ORF Size: 672 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.

RefSeq: [NM_000567.3](#)

RefSeq Size: 2024 bp

RefSeq ORF: 675 bp

Locus ID: 1401

UniProt ID: [P02741](#)

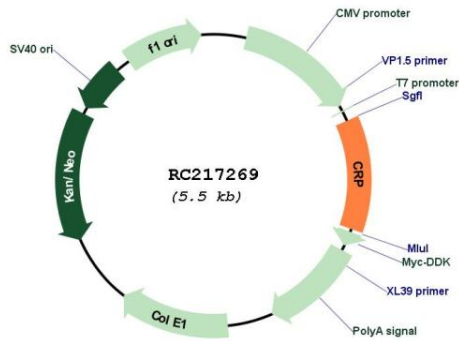
Cytogenetics: 1q23.2

Protein Families: Secreted Protein

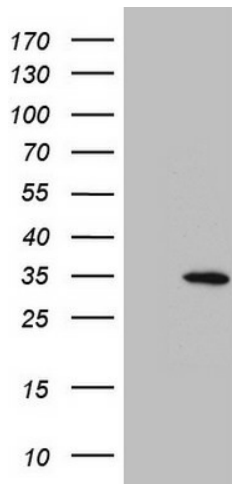
MW: 25 kDa

Gene Summary: The protein encoded by this gene belongs to the pentraxin family which also includes serum amyloid P component protein and pentraxin 3. Pentraxins are involved in complement activation and amplification via communication with complement initiation pattern recognition molecules, but also complement regulation via recruitment of complement regulators. The encoded protein has a calcium dependent ligand binding domain with a distinctive flattened beta-jellyroll structure. It exists in two forms as either a pentamer in circulation or as a nonsoluble monomer in tissues. It is involved in several host defense related functions based on its ability to recognize foreign pathogens and damaged cells of the host and to initiate their elimination by interacting with humoral and cellular effector systems in the blood. Consequently, the level of this protein in plasma increases greatly during acute phase response to tissue injury, infection, or other inflammatory stimuli. Elevated expression of the encoded protein is associated with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. [provided by RefSeq, Aug 2020]

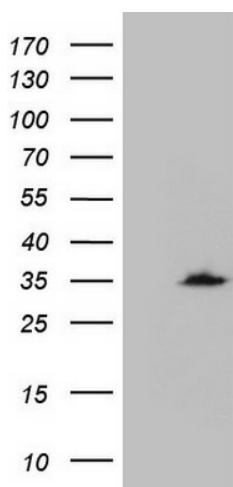
Product images:



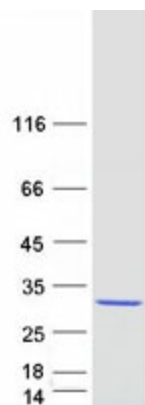
Circular map for RC217269



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CRP (RC217269, 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-CRP (1:500).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CRP (Cat# RC217269, 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-CRP (Cat# [TA809641])(1:500).



Coomassie blue staining of purified CRP protein (Cat# [TP317269]). The protein was produced from HEK293T cells transfected with CRP cDNA clone (Cat# RC217269) using MegaTran 2.0 (Cat# [TT210002]).