

Product datasheet for **RC203255**

Calprotectin (S100A8) (NM_002964) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Calprotectin (S100A8) (NM_002964) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: S100A8
Synonyms: 60B8AG; CAGA; CFAG; CGLA; CP-10; L1Ag; MA387; MIF; MRP8; NIF; P8
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203255 representing NM_002964
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGACCGAGCTGGAGAAAGCCTTGAAGCTCTATCATCGACGTCTACCACAAGTACTCCCTGATAAAGG
GGAATTTCCATGCCGTCTACAGGGATGACCTGAAGAAATTGCTAGAGACCGAGTGTCTCAGTATATCAG
GAAAAAGGGTGCAGACGTCTGGTTCAAAGAGTTGGATATCAACACTGATGGTGCAGTTAACTTCAGGAG
TTCCTCATTCTGGTGATAAAGATGGCGTGGCAGCCACAAAAAAGCCATGAAGAAAGCCACAAAGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203255 representing NM_002964
Red=Cloning site Green=Tags(s)

MLTELEKALNSIIDVYHKYSLIKGNFHAVYRDDLKLLLETECPQYIRKKGADVWFKELDINTDGA VNFQE
FLILVIKMGVA AHKKSHEESHKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8121_e07.zip

Restriction Sites: Sgfl-MluI



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Cloning Scheme:



ACCN: NM_002964

ORF Size: 279 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_002964.5](#)

RefSeq Size: 532 bp

RefSeq ORF: 282 bp

Locus ID: 6279

UniProt ID: [P05109](#)

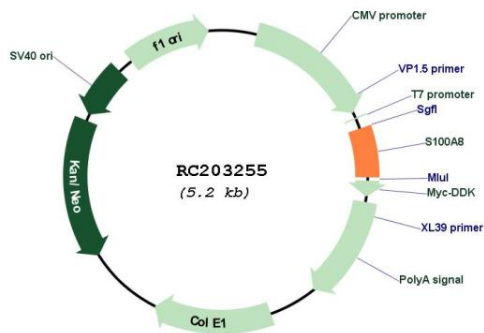
Cytogenetics: 1q21.3

Domains: S_100, EFh

MW: 11.3 kDa

Gene Summary: The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in the inhibition of casein kinase and as a cytokine. Altered expression of this protein is associated with the disease cystic fibrosis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC203255



Coomassie blue staining of purified S100A8 protein (Cat# [TP303255]). The protein was produced from HEK293T cells transfected with S100A8 cDNA clone (Cat# RC203255) using MegaTran 2.0 (Cat# [TT210002]).