

## Product datasheet for RC203951

## OriGene Technologies, Inc.

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## S100 alpha 6 (S100A6) (NM\_014624) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: S100 alpha 6 (S100A6) (NM\_014624) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: S100 alpha 6

Synonyms: 2A9; 5B10; CABP; CACY; PRA; S10A6

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC203951 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

CAGGAGTATGTCACCTTCCTGGGGGCCTTGGCTTTGATCTACAATGAAGCCCTCAAGGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203951 protein sequence

Red=Cloning site Green=Tags(s)

MACPLDQAIGLLVAIFHKYSGREGDKHTLSKKELKELIQKELTIGSKLQDAEIARLMEDLDRNKDQEVNF

**QEYVTFLGALALIYNEALKG** 

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6239">https://cdn.origene.com/chromatograms/mk6239</a> g04.zip

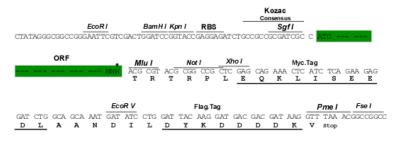
Restriction Sites: Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_014624

ORF Size: 270 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 <a href="mailto:customercom">customercom</a> 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>NM 014624.4</u>

RefSeq Size: 683 bp

 RefSeq ORF:
 273 bp

 Locus ID:
 6277

 UniProt ID:
 P06703

 Cytogenetics:
 1q21.3

 Domains:
 S 100, EFh

MW: 5\_100, EF

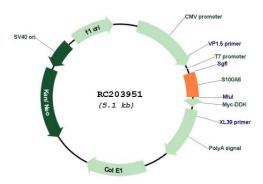
**Gene Summary:** The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-

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 stimulation of Ca2+dependent insulin release, stimulation of prolactin secretion, and exocytosis. Chromosomal rearrangements and altered expression of this gene have been implicated in melanoma.

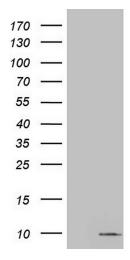
[provided by RefSeq, Jul 2008]



# **Product images:**

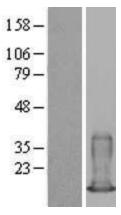


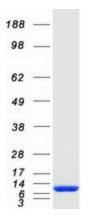
Circular map for RC203951



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY S100A6 (Cat# RC203951, 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-S100A6(Cat# [TA804299]). Positive lysates [LY415155] (100ug) and [LC415155] (20ug) can be purchased separately from OriGene.







Western blot validation of overexpression lysate (Cat# [LY415155]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203951 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified S100A6 protein (Cat# [TP303951]). The protein was produced from HEK293T cells transfected with S100A6 cDNA clone (Cat# RC203951) using MegaTran 2.0 (Cat# [TT210002]).