

## **Product datasheet for RC202590**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### S100 calcium binding protein A14 (S100A14) (NM 020672) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: S100 calcium binding protein A14 (S100A14) (NM 020672) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: S100 calcium binding protein A14

Synonyms: BCMP84; S100A15

**Mammalian Cell** 

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC202590 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGACAGTGTCGGTCAGCCAACGCAGAGGATGCTCAGGAATTCAGTGATGTGGAGAGGGCCATTGAGA CCCTCATCAAGAACTTTCACCAGTACTCCGTGGAGGGTGGGAAGGAGACGCTGACCCCTTCTGAGCTACG GGACCTGGTCACCCAGCAGCTGCCCCATCTCATGCCGAGCAACTGTGGCCTGGAAGAGAAAATTGCCAAC CTGGGCAGCTGCAATGACTCTAAACTGGAGTTCAGGAGTTTCTGGGAGCTGATTGGAGAAACGCGCCAAGA

GTGTGAAGCTGGAGAGGCCTGTCCGGGGGCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202590 protein sequence

Red=Cloning site Green=Tags(s)

MGQCRSANAEDAQEFSDVERAIETLIKNFHQYSVEGGKETLTPSELRDLVTQQLPHLMPSNCGLEEKIAN

 ${\tt LGSCNDSKLEFRSFWELIGEAAKSVKLERPVRGH}$ 

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6144">https://cdn.origene.com/chromatograms/mk6144</a> g11.zip

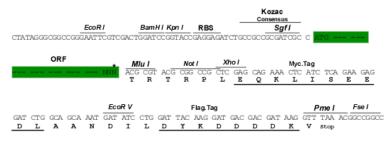
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





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

**ACCN:** NM\_020672

ORF Size: 312 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: <u>NM 020672.3</u>

RefSeq Size: 1075 bp
RefSeq ORF: 315 bp
Locus ID: 57402



 UniProt ID:
 Q9HCY8

 Cytogenetics:
 1q21.3

 Domains:
 S\_100

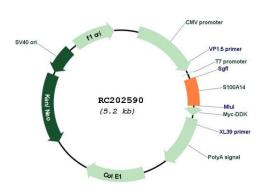
 MW:
 11.7 kDa

Gene Summary: This gene encodes a member of the S100 protein family which contains an EF-hand motif and

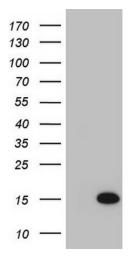
binds calcium. The gene is located in a cluster of \$100 genes on chromosome 1. Levels of the encoded protein have been found to be lower in cancerous tissue and associated with metastasis suggesting a tumor suppressor function (PMID: 19956863, 19351828). [provided

by RefSeq, Dec 2011]

# **Product images:**

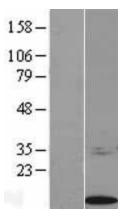


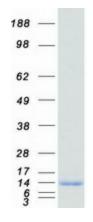
Circular map for RC202590



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY S100A14 (Cat# RC202590, 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-S100A14 (Cat# [TA807603])(1:2000). Positive lysates [LY402803] (100ug) and [LC402803] (20ug) can be purchased separately from OriGene.







Western blot validation of overexpression lysate (Cat# [LY402803]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202590 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified S100A14 protein (Cat# [TP302590]). The protein was produced from HEK293T cells transfected with S100A14 cDNA clone (Cat# RC202590) using MegaTran 2.0 (Cat# [TT210002]).