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Product datasheet for RC200277

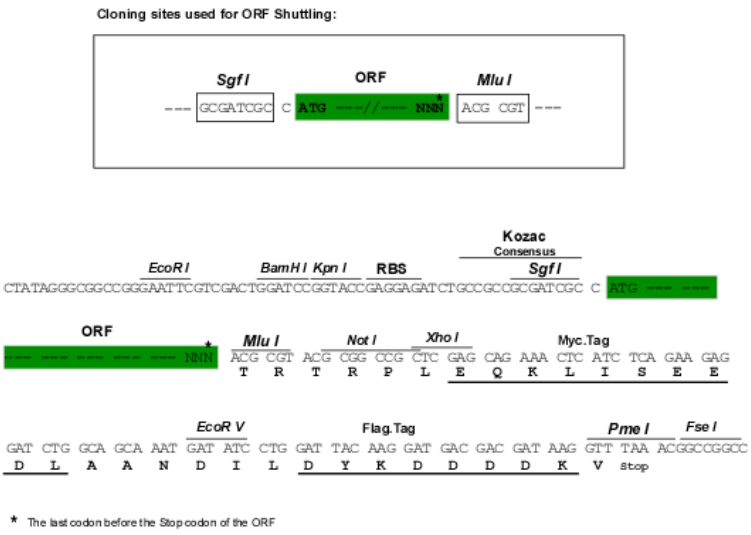
S100 beta (S100B) (NM_006272) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	S100 beta (S100B) (NM_006272) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	S100 beta
Synonyms:	NEF; S100; S100-B; S100beta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200277 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTCTGAGCTGGAGAAGGCCATGGTGGCCCTCATCGACGTTTTCCACCAATATTCTGGAAGGGAGGGAG ACAAGCACAAGCTGAAGAAATCCGAACTCAAGGAGCTCATCAACAATGAGCTTTCCCATTTCTTAGAGGA AATCAAAGAGCAGGAGGTTGTGGACAAAGTCATGGAAACACTGGACAATGATGGAGACGGCGAATGTGAC TTCCAGGAATTCATGGCCTTTGTTGCCATGGTTACTACTGCCTGCCACGAGTTCTTTGAACATGAG ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC200277 protein sequence Red=Cloning site Green=Tags(s) MSELEKAMVALIDVFHQYSGREGDKHKLKKSELKELINNELSHFLEEIKEQEVVDKVMETLDNDGDGECD FQEFMAFVAMVTTACHEFFEHE TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6081_h02.zip
Restriction Sites:	SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_006272

ORF Size: 276 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.

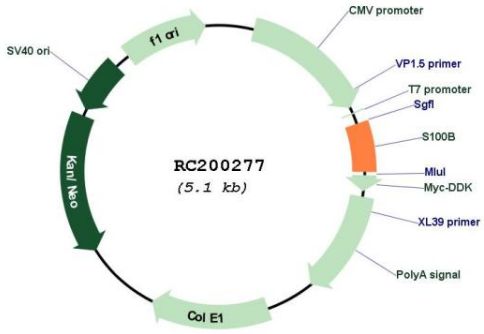
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in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

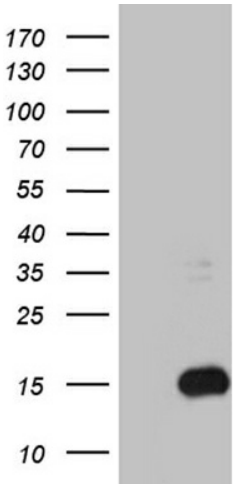
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_006272.1, NP_006263.1
RefSeq Size:	1135 bp
RefSeq ORF:	279 bp
Locus ID:	6285
UniProt ID:	P04271
Cytogenetics:	21q22.3
Domains:	S_100, EFh
MW:	10.7 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; however, this gene is located at 21q22.3. This protein may function in Neurite extension, proliferation of melanoma cells, stimulation of Ca2+ fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly. Chromosomal rearrangements and altered expression of this gene have been implicated in several neurological, neoplastic, and other types of diseases, including Alzheimer's disease, Down's syndrome, epilepsy, amyotrophic lateral sclerosis, melanoma, and type I diabetes. [provided by RefSeq, Jul 2008]

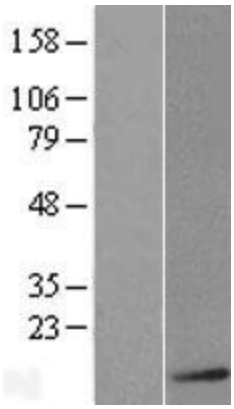
Product images:



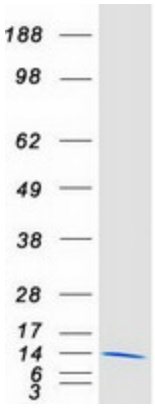
Circular map for RC200277



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY S100B (Cat# RC200277, 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-S100B. (1:2000) (1:500) (Cat# [TA807235]). Positive lysates [LY416735] (100ug) and [LC416735] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416735]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200277 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified S100B protein (Cat# [TP300277]). The protein was produced from HEK293T cells transfected with S100B cDNA clone (Cat# RC200277) using MegaTran 2.0 (Cat# [TT210002]).