

## Product datasheet for **SC127092**

### S100 beta (S100B) (NM\_006272) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	S100 beta (S100B) (NM_006272) Human Untagged Clone
Tag:	Tag Free
Symbol:	S100 beta
Synonyms:	NEF; S100; S100-B; S100beta
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC127092 sequence for NM_006272 edited (data generated by NextGen Sequencing)

```
ATGTCTGAGCTGGAGAAGCCATGGTGGCCCTCATCGACGTTTTCCACCAATATTCTGGA
AGGGAGGGAGACAAGCACAAAGCTGAAGAAATCCGAACTGAAGGAGCTCATCAACAATGAG
CTTTCCATTTCTTAGAGGAAATCAAAGAGCAGGAGTTGTGGACAAAGTCATGGAAACA
CTGGACAATGATGGAGACGGCGAATGTGACTTCCAGGAATTCATGGCCTTTGTTGCCATG
GTTACTACTGCCTGCCACGAGTTCTTTGAACATGAGTGA
```

Clone variation with respect to NM\_006272.2

#### 5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_006272 unedited
ATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGACGCCTGCAGCAAGGAGAC
CAGGAAGGGGTGAGACAAGGAAGAGGATGTCTGAGCTGGAGAAAGCCATGGTGGCCCTCA
TCGACGTTTTCCACCAATATTCTGGAAGGGAGGGAGACAAGCACAAAGCTGAAGAAATCCG
AACTGAAGGAGCTCATCAACAATGAGCTTTCCATTTCTTAGAGGAAATCAAAGAGCAGA
GGTTGTGGACAAAGTCATGGAAACTGGACAATGATGGAGACGGCGAATGTGACTTCCA
GGAATTCATGGCCTTTGTTGCCATGGTTACTACTGCCTGCCACGAGTTCTTTGAACATGA
GTGAGATTAGAAAGCAGCCAAACCTTTCTGTACAGAAGACGGTCATGCAAGAAAGCAAC
AGCAAGGGCTTGACCTAGTAGGAGCTGAGCTTCCAGCCCGTGGTGTAGCTAATTAGAAG
CTTGATTTGCTTTGTGATTGAAAAATTGAAAACCTTTTCAAAGGCTGTTTTAACGGCCT
GATCATTCTTTCTGTATATTAGCCTGTGTGGGAAGCTGACTGCCCCAGGACCTCTGTAA
CAGACTTAGGGAACAGGGCCTAATGGAAAAAACGGGGACGGGCAGCCGCATGGGCCGGGT
AAACCTACCCCGGGAGGGAACCTTGCTACGAAATACCCCGGGGGACCTTAAAACCTTCA
CTACTTTAAAAACAAGCCTATCCGCATTATTTGGAAAAAATAAATCACCTAAAT
GGGGCCCGGTCAATAATGGGTTCTTGA AAAACCCGGGGGGGATTCCCGGAACCTCCCAT
GCCTTCTGCCCCNGGAAATGCCACTCAAGGCCCCACCTTGCAAAAAAATAATGCATAT
TTGGTGAAA
```



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Restriction Sites:	NotI-NotI
ACCN:	NM_006272
OTI Disclaimer:	<p>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:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
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:	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
RefSeq:	<a href="#">NM_006272.1</a> , <a href="#">NP_006263.1</a>
RefSeq Size:	1095 bp
RefSeq ORF:	279 bp
Locus ID:	6285
UniProt ID:	<a href="#">P04271</a>
Cytogenetics:	21q22.3
Domains:	S_100, EFh

**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 Ca<sup>2+</sup> 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]