

## Product datasheet for **MR227188**

### **S100b (NM\_009115) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	S100b (NM_009115) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	S100b
Synonyms:	AI850290; Bpb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>&gt;MR227188 ORF sequence</p> <p>Red=Cloning site Blue=ORF Green=Tags(s)</p> <p>TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC<b>CGATCGC</b></p> <p>ATGTCCGAGCTGGAGAAGGCCATGGTTGCCCTCATTGATGTCTTCCACCAGTACTCCGGGCGAGAGGGTGACAAGCACAAGCTGAAGAAGTCAGAACTGAAGGAGCTTATCAACAACGAGCTCTCTCACTTCCTGGAGGAATCAAGGAGCAGGAAGTGGTGGACAAAGTGATGGAGACGCTGGACGAAGATGGGGATGGGGAGTGTGACATCCAGGAGTTCATGGCCTTCGTCGCCATGGTGACCACGGCCTGCCATGAGTTCTTTGAACATGAG</p> <p><b>ACGCGT</b>ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA</p>
Protein Sequence:	<p>&gt;MR227188 protein sequence</p> <p>Red=Cloning site Green=Tags(s)</p> <p>MSELEKAMVALIDVFHQYSGREGDKHKLKKSELKELINNELSHFLEEIKEQEVVDKVMETLDEDGDGECDFQEFMAFVAMVTTACHEFFEHE</p> <p><b>TR</b>TRPLE<b>QKL</b>ISEEDLAANDILDYKDDDDKV</p>
Restriction Sites:	Sgfl-MluI


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### Cloning Scheme:



ACCN: NM\_009115

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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

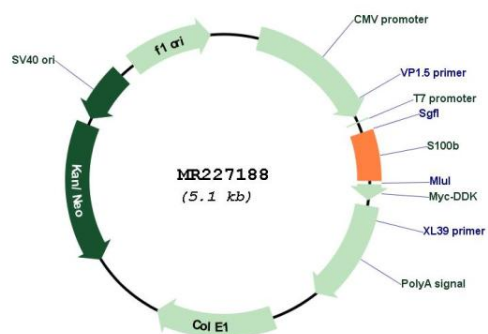
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in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

<b>Reconstitution Method:</b>	<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>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_009115.3, NP_033141.1</u>
<b>RefSeq Size:</b>	1676 bp
<b>RefSeq ORF:</b>	279 bp
<b>Locus ID:</b>	20203
<b>UniProt ID:</b>	<u>P50114</u>
<b>Cytogenetics:</b>	10 38.76 cM
<b>MW:</b>	10.7 kDa
<b>Gene Summary:</b>	Weakly binds calcium but binds zinc very tightly-distinct binding sites with different affinities exist for both ions on each monomer. Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites. Binds to and initiates the activation of STK38 by releasing autoinhibitory intramolecular interactions within the kinase. Interaction with AGER after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling. Could assist ATAD3A cytoplasmic processing, preventing aggregation and favoring mitochondrial localization. May mediate calcium-dependent regulation on many physiological processes by interacting with other proteins, such as TPR-containing proteins, and modulating their activity (By similarity).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MR227188