

# **Product datasheet for MG227188**

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

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** S100b (NM\_009115) Mouse Tagged ORF Clone

Tag: TurboGFP

Symbol: S100b

Synonyms: Al850290; Bpb

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG227188 representing NM\_009115

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

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCCGAGCTGGAGAAGGCCATGGTTGCCCTCATTGATGTCTTCCACCAGTACTCCGGGCGAGAGGGTGACAAGCACAAGCTGAAGAAGTCAGAACTGAAGGAGCTTATCAACAACGAGCTCTCTCACTTCCTGGAGGAAATCAAGGAGCAGGAAGTGGTGGACAAAGTGATGAGACGCTGGACGAAGATGGGGATGTGACTTCCAGGAGTTCATGGCCTTCGTCGCCATGGTGACCACGGCCTGCCATGAGTTCTTTGAACATGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG227188 representing NM\_009115

Red=Cloning site Green=Tags(s)

 ${\tt MSELEKAMVALIDVFHQYSGREGDKHKLKKSELKELINNELSHFLEEIKEQEVVDKVMETLDEDGDGECD}$ 

FQEFMAFVAMVTTACHEFFEHE

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul



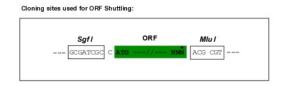
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

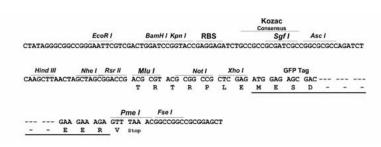
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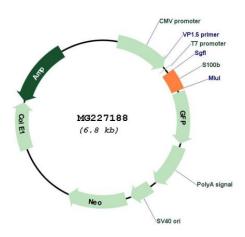


### **Cloning Scheme:**





## Plasmid Map:



**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 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 009115.3, NP 033141.1

RefSeq Size: 1676 bp RefSeq ORF: 279 bp Locus ID: 20203 UniProt ID: P50114

Cytogenetics: 10 38.76 cM

**Gene Summary:** 

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 calciumbinding 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]