

Product datasheet for **MG225156**

Unc13a (NM_001029873) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Unc13a (NM_001029873) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Unc13a
Synonyms: 2410078G03Rik; Munc13-1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG225156 representing NM_001029873
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGTCTCTGCTGTGCGTGGGAGTCAAAAAAGCCAAGTTTGACGGTGCCCAAGAGAAGTTCAACACATACG
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 GAGAGTGGCTCACACTGGACTCTCAGGCCATCATGGCGGACAGTGAGATCTGTGGGACCAAGGACCCAC
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GGTGGTGGCCTTATCATCATTGACAGCATGCCAGACATCAGGAAACGGAAGCCATTCCCCTCGTGAGCG
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AGGAGGGCGGTGCCGCGCTGCGCCC

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225156 representing NM_001029873

Red=Cloning site Green=Tags(s)

MSLLCVGVKAKAFDGAQEKFNYYVTLKVQNVKSTTIAVRGSQPSWEQDFMFEINRLDLGLTVEVWNKGLI
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 VHVLFTHPGTGEQKVTVKVVAANDLKWQTSGIFRPFIEVNI VGPQLSDKKRKFATKSKNNSWAPKYNES
 FQFSLSADAGPECYELQVCVKDYCFAREDRVTGLAVLQLRELAQRGSAACWPLGRRIHMDDTGLTVLRI
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TRTRPLE - GFP Tag - V

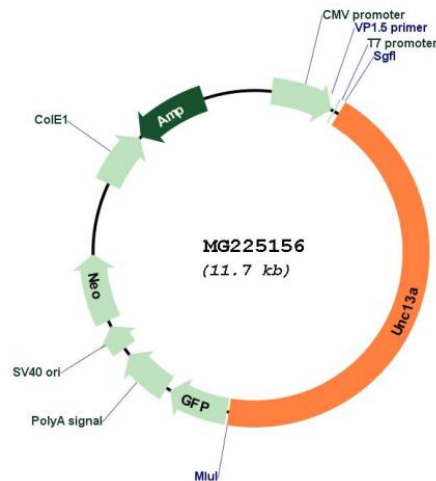
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001029873

ORF Size: 5136 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: [NM_001029873.2](#), [NP_001025044.2](#)

RefSeq Size: 7983 bp

RefSeq ORF: 5139 bp

Locus ID: 382018

UniProt ID: [Q4KUS2](#)

Cytogenetics: 8 B3.3

Gene Summary: Plays a role in vesicle maturation during exocytosis as a target of the diacylglycerol second messenger pathway. Involved in neurotransmitter release by acting in synaptic vesicle priming prior to vesicle fusion and participates in the activity-dependent refilling of readily releasable vesicle pool (RRP). Essential for synaptic vesicle maturation in most excitatory/glutamatergic but not inhibitory/GABA-mediated synapses. Also involved in secretory granule priming in insulin secretion. Plays a role in dendrite formation by melanocytes (By similarity).[UniProtKB/Swiss-Prot Function]