

## Product datasheet for **MC224865**

### Unc13a (NM\_001029873) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Unc13a (NM\_001029873) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Unc13a  
**Synonyms:** 2410078G03Rik; Munc13-1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224865 representing NM\_001029873  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCTCTGCTGTGCGTGGGAGTCAAAAAGCCAAGTTTGACGGTGCCCAAGAGAAGTTCAACACATACG  
 TGACGCTGAAGGTGCAGAACGTGAAGAGCACTACCATAGCTGTACGTGGCAGCCAGCCAGCTGGGAGCA  
 GGACTTCATGTTTGGATCAACCGCTGGATCTAGGCCTGACCGTGGAGGTGTGGAACAAGGGTCTCATC  
 TGGGACACGATGGTGGGTACTGTGTGGATCCCGCTGCGGACCATCCGCCAGTCCAATGAGGAGGGCCAG  
 GAGAGTGGCTCACACTGGACTCTCAGGCCATCATGGCGGACAGTGAATCTGTGGGACCAAGGACCCAC  
 CTTCCATCGCATCCTCCTGGACGCTATTTTCGAGCTGCCGTTGGACATCCCTGAGGAGGAGGCACGCTAC  
 TGGGCCAAGAAGCTGGAGCAGCTGAATGCCATGCGTGACCAGGATGAGTACTCCTTCCAGGACCAGCAGG  
 ACAAGCCGCTGCCAGTGCCAGCAGCCAGTGTGCAACTGGAATTAATTTGGCTGGGGAGAACAAGAAATGA  
 CGACCCCGACAGTGGCGTGGATGACCGGGACAGTACTATAGGAGTGAGACCAGCAACAGCATCCACCCG  
 CCCTACTATACGACTTCGACGCCAACGCCTCTGTGCACCACTACTCCGTGCGACCGCCCTCTGGGGT  
 CCCGGGAGTCTACAGTACTCCATGCACAGCTATGAGGAGTTCTCTGAGCCGCGGGCCTCAGCCCCAC  
 AGGCAGCAGCCGCTATGCTTCTTCCGGGAGCTGAGCCAGGGAAGCTCACAGCTGAGCGAGGACTTCGAC  
 CCTGATGAGCACAGCCTGCAGGGCTCGGAGCTGGATGACGAGAGGGACCGGATTCTTATCACTCCTGTG  
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 GGACCTGGAAGATGAGGAGCTGCCGAGGAGGAGGAGGTTGGAGGAGGAGGGGAGGAGGAATTGGAG  
 GAAGAGGATTTGGAGGAGGAGGAGGAGGTGCTGATGACCTGGCCAGCTACACCCAGCAGGAGGACACCA  
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 TTCAGTGTGCCTACAGAGGCCCGGAGGTGGCCAAAGGCATCCCAAAGCAGCCACACCCGAGGAGAAG  
 GCAGCTGCAGAGCTGCGCAGGAAGCCGAGCCCCCAAGTCTGAGGAGAGTTTCAGATCTCGAGAGGAGG  
 AAGAGGGCCAGGAAGGGCAGGATGCCATGTCCAGAGCCAAAGCCAACTGGTTGCGAGCCTTCAACAAGGT  
 GCGCATGCAGCTGCAGGAGGCCGAGGAGAAGGGGATATGTCTAAGTCTCTATGGTTCAAAGCGGTCTC  
 GGTGGTGGCTTATCATCATTGACAGCATGCCAGACATCAGGAAACGGAAGCCATTCCCTCGTGAGCG



ACCTGGCTATGTCATTGGTGCAGTCTCGGAAGGCAGGCATCACCTCGGCCTTGGCCTCCAGCACGTTGAA  
 CAATGAAGAGCTGAAAAATCACGTTTACAAGAAGACCCTGCAAGCCTTAATCTACCCCATCTCCTGCACC  
 ACGCCGCAACAATTCGAGGTGTGGACGGCCACCACGCCCACTACTGCTATGAGTGCGAGGGGCTGCTGT  
 GGGGCATCGCGCGGCAGGGCATGCGATGCACCGAGTGCGGCGTTAAGTCCACGAGAAGTGCCAGGACCT  
 GCTCAATGCGGATTGCCCTGCAGCGGGCGGCTGAGAAGAGTTCCAAGCATGGCGCTGAAGACCCGCACGCAG  
 AACATCATCATGGTGTGAAGGACCGCATGAAGATCCGCGAGCGCAACAAGCCTGAGATCTTCGAGCTTA  
 TCCAAGAGATCTTCGCGGTCAACAAGAGCGCACACACAGCAGATGAAAGCTGTCAAGCAGAGTGCTGT  
 GGACGGCACATCCAAGTGGTCTGCCAAAATTAGCATCACAGTGGTCTGTGCCCAGGGCTTGACAGGGCCAAG  
 GACAAGACAGGATCCAGTGACCCCTATGTACCCTCCAGGTTGGGAAGACCAAGAAAAGGACAAAAACCA  
 TCTACGGGAACCTCAACCCAGTGTGGGAAGAGAATTTTCATTTTGAATGTCACAACCTCTCTGACCGGAT  
 CAAGGTTCTGTGTTGGGATGAAGATGACGACATAAAAATCCCGTGTGAAACAAAGTTTAAGAGGGAGTCT  
 GATGACTTCTAGGGCAGACAATCATCGAGGTGCGGACGCTTAGCGGCGAGATGGATGTGTGGTACAATC  
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 GGAGGAGAAGGTGGCGCCCTACCATGTCCAGTACACCTGTCTGCATGAGAACCTGTTCCACTTTGTGACG  
 GACGTGCAGAACAATGGTGTGGTGAAGATTCCCGATGCCAAGGGTACGACGCCTGGAAGGTTTACTACG  
 ATGAGACGGCCAGGAGATCGTGGATGAGTTTGCATGCCCTATGGTGTGAGTCCATCTACCAAGCCAT  
 GACCCACTTTGCCTGCCTCTCCTCCAAGTATATGTGCCCTGGGGTACCCGCTGTGATGAGCACCCCTGCTT  
 GCCAACATCAACGCCTACTACGCACACACCACCGCCTCCACCAACGTGTCTGCCTCTGACCGCTTCGCTG  
 CCTCTAATTTTCGGGAAAGAGCGCTTTGTGAAACTTCTGGACCAGCTACACAATTCCTGCGGATCGACCT  
 GTCCATGTACCGGAACAACCTCCAGCCAGCAGCCCTGAGCGGCTGCAGGATCTCAAGTCCACGGTGGAC  
 CTGCTCACCAGCATCACCTTCTCCGGATGAAGGTTTCAAGTGCAGAGCCCGCGTGCAGCCAGG  
 TAGTAAAAGACTGTGTAAGGCTGCCTCACTCCACCTATGAGTACATCTTCAACAACCTGCCATGAGCT  
 CTATGGCCGGGAGTACCAACCGATCCGGCCAAGAAGGGGAGGTTCCCCAGAGGAGCAAGGCCATAGC  
 ATCAAGAACCTGGATTTCTGGTCCAAGCTGATCACCTCATCGTGTCTATCATCGAGGAGATAAGAATT  
 CTTACACACCCTGCCTCAATCAGTTTCCCAGGAGCTCAATGTGGGAAGATCAGTGCTGAGGTGATGTG  
 GAGCCTATTTGCCAAGACATGAAGTACGCCATGGAGGAACATGACAAACACCGGCTGTGTAAGAGCGCA  
 GATTACATGAACCTGCACCTCAAGGTGAAGTGGCTGTACAATGAGTACGTGGCCGAGCTGCCACCTTCA  
 AGGACCGTGTGCCTGAGTACCCTGCGTGGTTTGGCCCTTCGTCATCCAGTGGTTGGATGAGAATGAGGA  
 GGTGTCCCGGACTTCTGCATGGTGCCTCGAGCGGGACAAGAAGGACGGGTTCCAGCAGACCTCAGAG  
 CACGCCCTGTTCTTGTCTCAGTGGTGGACGTCTTCTCCAGCTTAACCAGAGTTTTCGAGATCATCAAGA  
 AGCTGGAGTGTCTGACCCAGATCGTGGGCCATTACATGCGGCGTTTTGCCAAGACCATTAGCAATGT  
 GCTTCTCCAGTATGCAGACATCGTTTCCAAGGACTTCGCCTCCTACTGCTCCAAGGAGAAGGAGAAAGTG  
 CCCTGCATCCTCATGAACAACACACAGCAACTACGAGTGCAGCTGGAGAAGATGTTTGGGCGATGGGCG  
 GGAAGGAGCTGGATGCCGAGGCCAGTGGCACCCCTGAAGGAGCTGCAGGTGAAACTCAACAATGTCCTGGA  
 TGAACCTCAGCCATGTGTTTCCACCAGCTTCCAGCCACACATTGAGGAATGCGTCAGACAGATGGGTGAC  
 ATCCTGAGCCAGGTGAAGGGCACAGGCAATGTACCTGCCAGTGCCTGCAGCAGCGTGGCCAGGATGCAG  
 ACAATGTGCTGCAGCCCATCATGGATCTTCTGGACAGCAACCTCACCCCTGTTGCCAAAATCTGTGAGAA  
 GACAGTTCTGAAGCGGGTGTGAAGGAGCTCTGGAAGCTGGTGTGAACAACAATGGAGAAGACCATCGTC  
 CTGCCACCGCTCACTGACCAGACGATGATTGGCACCCCTTGGAGAAAACATGGCAAGGGCCTAGAAAAGG  
 GCAGGGTGAAACTGCCAAGCCACTCAGACGGGACACAAAATGATCTTCAATGCTGCCAAGGAGCTGGGCCA  
 GCTGTCCAAACTTAAGGATCACATGGTGCGGGAAGAAGCCAAGAGCTTGACCCCGAAGCAGTGTGCTGTT  
 GTTGAACCTGGCCCTGGACACCATCAAGCAATACTTCCACGCGGGGGCGTTGGCCTCAAGAAGACCTTCC  
 TGGAGAAGAGCCCGACCTCCAGTCCCTGCGCTACGCCCTGTGCTCTACACGCAAGCCACCGACCTGCT  
 CATCAAAACCTTCGTGCAGACGCAGTACGCGCAGGGCTCTGGTGTGGAGGACCTGTAGGTGAAGTGTCC  
 GTCCACGTGGAGCTGTTACACATCCAGGAACTGGGGAACAGAAGGTACAGTGAAGGTGGTGGCCGCCA  
 ATGACCTCAAGTGGCAGACTTCTGGCATCTTCCGCCGTTTCATCGAGGTCAACATCGTTGGACCTCAGCT  
 TAGCGACAAGAAACGCAAGTTCCGCCACCAATCCAAAACAACAGCTGGGCGCCCAAGTATAACGAGAGC  
 TTCCAGTTCTCCCTGAGCGCCGACGCGGGCCCGAGTGTACGAGCTGCAGGTGTGCGTGAAGGACTACT  
 GCTTTGCGCGCAAGACCGCACGGTGGGGCTGGCGGTGCTGCAACTGCGAGAGCTGGCCAGCGCGGGAG  
 CGCCGCGTGTGGCTTCCACTCGGCCGCCCATCCACATGGACGACACGGGGCTCACAGTGTGCGCATC  
 CTGTGCGACGCGCAACGATGAGGTGGCCAAGGAATTCGTCAAGCTCAAGTCCGACACGCGCTCAGCCC  
 AGGAGGGCGGTGCCGCGCTGCGCCCTAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_001029873
<b>Insert Size:</b>	5139 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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>RefSeq:</b>	<u><a href="#">NM_001029873.2</a></u> , <u><a href="#">NP_001025044.2</a></u>
<b>RefSeq Size:</b>	7983 bp
<b>RefSeq ORF:</b>	5139 bp
<b>Locus ID:</b>	382018
<b>UniProt ID:</b>	<u><a href="#">Q4KUS2</a></u>
<b>Cytogenetics:</b>	8 B3.3
<b>Gene Summary:</b>	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]