

Product datasheet for **RG219186**

UNC13B (NM_006377) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	UNC13B
Synonyms:	MUNC13; munc13-2; UNC13; Unc13h2
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG219186 representing NM_006377
Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGGCGCGCC

ATGTCACCTGCTCTGCGTGCGCGTTAAAAGGGCCAAATTCAGGGTTCACAGATAAAATTTAACACATATG
TGACCCGTGAAAGTACAGAATGTGAAGAGCACAACCTGTAGCAGTTTCGTGGTGATCAGCCTTCCTGGGAACA
GGATTTTCATGTTTGTAGATTAGTCGCTGGACCTGGGCTAAGTGTGGAGGTATGGAACAAAGGAGCTGATC
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GGAGGAGGGGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG219186 representing NM_006377

Red=Cloning site Green=Tags(s)

MSLLCVRVKRAKFQSPDKFNTYVTLKVQNVKSTTVAVRGDQPSWEQDFMFEISRDLGLSVEVWNKGLI
WDTMVGTVWIALKTIRQSDEEGPGEWSTLEAETLMKDDEICGTRNPTPHKILLDTRFELPFDIPEEEARY
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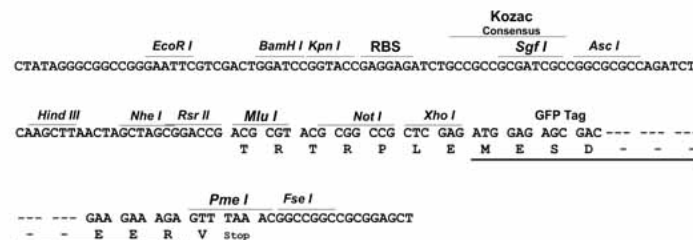
TRTRPLE - GFP Tag - V

Restriction Sites:

AscI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

NM_006377

ORF Size:

4773 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_006377.2 , NP_006368.2
RefSeq Size:	6328 bp
RefSeq ORF:	4776 bp
Locus ID:	10497
UniProt ID:	Q14795
Cytogenetics:	9p13.3
Domains:	C2, DAG_PE-bind
Protein Families:	Druggable Genome
Gene Summary:	This gene is expressed in the kidney cortical epithelial cells and is upregulated by hyperglycemia. The encoded protein shares a high level of similarity to the rat homolog, and contains 3 C2 domains and a diacylglycerol-binding C1 domain. Hyperglycemia increases the levels of diacylglycerol, which has been shown to induce apoptosis in cells transfected with this gene and thus contribute to the renal cell complications of hyperglycemia. Studies in other species also indicate a role for this protein in the priming step of synaptic vesicle exocytosis. [provided by RefSeq, Jul 2008]

Circular map for RG219186

