

Product datasheet for RC209141

Munc 13 4 (UNC13D) (NM_199242) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Munc 13 4 (UNC13D) (NM_199242) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Munc 13 4
Synonyms:	FHL3; HLH3; HPLH3; Munc13-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209141 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGACACTCCTCTCCCATCCGACGAGCGCCCTCCCTTCTTGCGCCAGGCCATCAAGATAAGGCGCC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC209141 protein sequence

Red=Cloning site Green=Tags(s)

MATLLSHPQQRPPFLRQAIKIRRRVRDLQDPPQMAPEIQPPSHHFSPEQRALLYEDALYTVLHRLGHP
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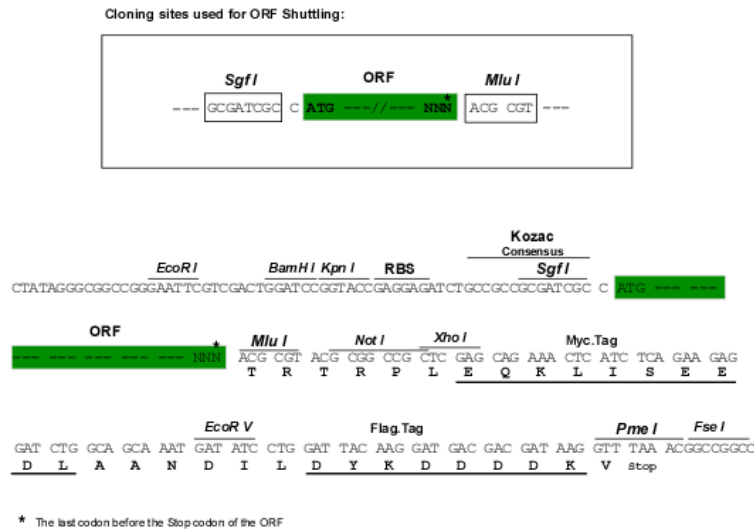
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Chromatograms:

https://cdn.origene.com/chromatograms/mk6204_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_199242

ORF Size: 3270 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_199242.3](#)

RefSeq Size: 4406 bp

RefSeq ORF: 3273 bp

Locus ID: 201294

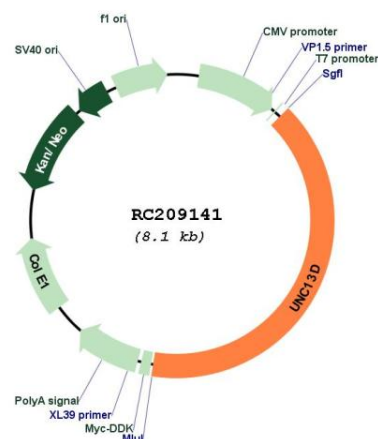
UniProt ID: [Q70J99](#)

Cytogenetics: 17q25.1

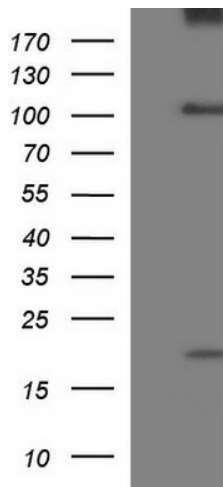
MW: 123.3 kDa

Gene Summary: This gene encodes a protein that is a member of the UNC13 family, containing similar domain structure as other family members but lacking an N-terminal phorbol ester-binding C1 domain present in other Munc13 proteins. The protein appears to play a role in vesicle maturation during exocytosis and is involved in regulation of cytolytic granules secretion. Mutations in this gene are associated with familial hemophagocytic lymphohistiocytosis type 3, a genetically heterogeneous, rare autosomal recessive disorder. [provided by RefSeq, Jul 2008]

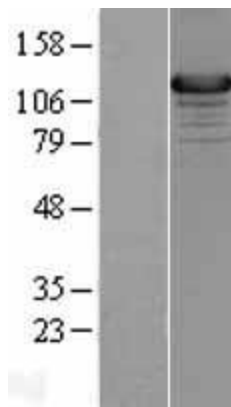
Product images:



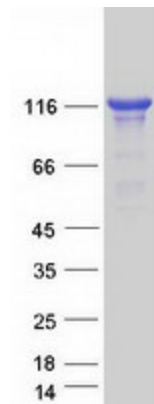
Circular map for RC209141



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UNC13D (Cat# RC209141, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-UNC13D (Cat# [TA507267]). Positive lysates [LY403710] (100ug) and [LC403710] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403710]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209141 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UNC13D protein (Cat# [TP309141]). The protein was produced from HEK293T cells transfected with UNC13D cDNA clone (Cat# RC209141) using MegaTran 2.0 (Cat# [TT210002]).