OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC200386

Neuraminidase (NEU1) (NM_000434) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neuraminidase (NEU1) (NM_000434) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Neuraminidase
Synonyms:	NANH; NEU; SIAL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200386 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTGGGGAGCGACCCAGCACGGCGCTCCCGGACAGACGCTGGGGGCCGCGGATTCTGGGCTTCTGGG
GAGGCTGTAGGGTTTGGGTGTTTGCCGCGATCTTCCTGCTGCTGTCTCTGGCAGCCTCCTGGTCCAAGGC
TGAGAACGACTTCGGTCTGGTGCAGCCGCTGGTGACCATGGAGCAACTGCTGTGGGTGAGCGGGAGACAG
ATCGGCTCAGTGGACACCTTCCGCATCCCGCTCATCACAGCCACTCCGCGGGGCACTCTTCTCGCCTTTG
CTGAGGCGAGGAAAATGTCCTCATCCGATGAGGGGGCCAAGTTCATCGCCCTGCGGAGGTCCATGGACCA
GGGCAGCACATGGTCTCCTACAGCGTTCATTGTCAATGATGGGGATGTCCCCGATGGGCTGAACCTTGGG
GCAGTAGTGAGCGATGTTGAGACAGGAGTAGTATTTCTTTTCTACTCCCTTTGTGCTCACAAGGCCGGCT
GCCAGGTGGCCTCTACCATGTTGGTATGGAGCAAGGATGATGGTGTTTCCTGGAGCACACCCCGGAATCT
CTCCCTGGATATTGGCACTGAAGTGTTTGCCCCTGGACCGGGCTCTGGTATTCAGAAACAGCGGGAGCCA
CGGAAGGGCCGCCTCATCGTGTGTGGCCATGGGACGCTGGAGCGGGACGGAGTCTTCTGTCTCCTCAGCG
ATGATCATGGTGCCTCCTGGCGCTACGGAAGTGGGGTCAGCGGCATCCCCTACGGTCAGCCCAAGCAGGA
AAATGATTTCAATCCTGATGAATGCCAGCCCTATGAGCTCCCAGATGGCTCAGTCGTCATCAATGCCCGA
AACCAGAACAACTACCACTGCCACTGCCGAATTGTCCTCCGCAGCTATGATGCCTGTGATACACTAAGGC
CCCGTGATGTGACCTTCGACCCTGAGCTCGTGGACCCTGTGGTAGCTGCAGGAGCTGTAGTCACCAGCTC
CGGCATTGTCTTCTTCTCCAACCCAGCACATCCAGAGTTCCGAGTGAACCTGACCCTGCGATGGAGCTTC
AGCAATGGTACCTCATGGCGGAAAGAGACAGTCCAGCTATGGCCAGGCCCCAGTGGCTATTCATCCCTGG
CAACCCTGGAGGGCAGCATGGATGGAGAGGAGCAGGCCCCCCAGCTCTACGTCCTGTATGAGAAAGGCCG
GAACCACTACACAGAGAGCATCTCCGTGGCCAAAATCAGTGTCTATGGGACACTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Protein Sequence:

>RC200386 protein sequence
Red=Cloning site Green=Tags(s)

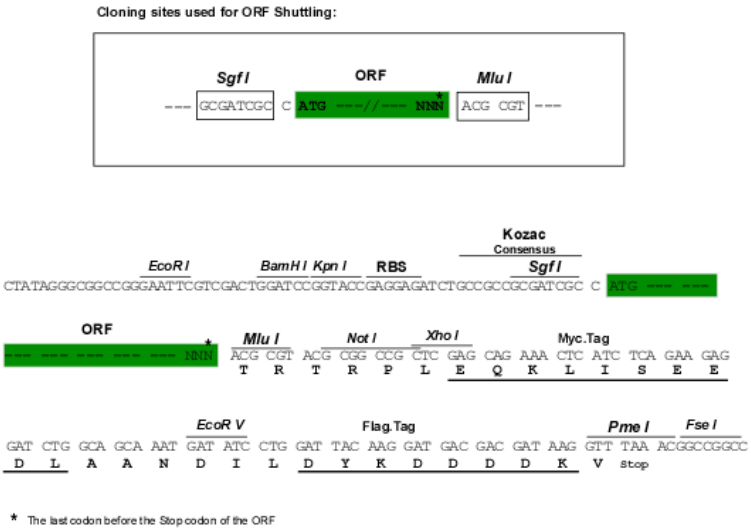
MTGERPSTALPDRRWGPRILGFWGGCRVWVFAAIFLLLSLAASWSKAENDFGLVQPLVTMEQLLWVSGRQ
IGSVDTFRIPLITATPRGTLLAFAEARKMSSSDEGAKFIALRRSMDQGSTWSPTAFIVNDGDVPDGLNLG
AVVSDVETGVVFLFYSLCAHKAGCQVASTMLVWSKDDGVSWSTPRNLSLDIGTEVFAPGPGSGIQKQREP
RKGRLIVCGHGTLERDGVFCLLSDDHGASWRYGSGVSGIPYGQPKQENDFNPDECQPYELPDGSVVINAR
NQNNYHCHCRIVLRSYDACDTLRPRDVTFDPELVDPVVAAGAVVTSSGIVFFSNPAHPEFRVNLTLRWSF
SNGTSWRKETVQLWPGPSGYSSLATLEGSMDGEEQAPQLYVLYEKGRNHYTESISVAKISVYGTL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6081_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000434

ORF Size: 1245 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.

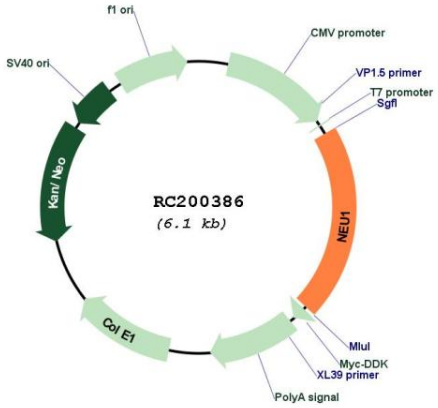
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

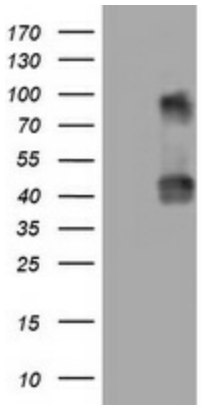
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid 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_000434.4
RefSeq Size:	2088 bp
RefSeq ORF:	1248 bp
Locus ID:	4758
UniProt ID:	Q99519
Cytogenetics:	6p21.33
Domains:	BNR
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Lysosome, Other glycan degradation, Sphingolipid metabolism
MW:	45.5 kDa
Gene Summary:	The protein encoded by this gene is a lysosomal enzyme that cleaves terminal sialic acid residues from substrates such as glycoproteins and glycolipids. In the lysosome, this enzyme is part of a heterotrimeric complex together with beta-galactosidase and cathepsin A (the latter is also referred to as 'protective protein'). Mutations in this gene can lead to sialidosis, a lysosomal storage disease that can be type 1 (cherry red spot-myoclonus syndrome or normosomatic type), which is late-onset, or type 2 (the dysmorphic type), which occurs at an earlier age with increased severity. [provided by RefSeq, Jul 2008]

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Product images:

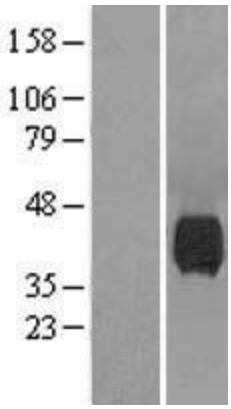


Circular map for RC200386

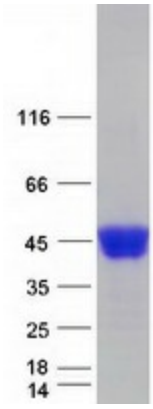


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NEU1 (Cat# RC200386, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NEU1(Cat# [TA801727]). Positive lysates [LY424720] (100ug) and [LC424720] (20ug) can be purchased separately from OriGene.

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US



Western blot validation of overexpression lysate (Cat# [LY424720]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200386 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NEU1 protein (Cat# [TP300386]). The protein was produced from HEK293T cells transfected with NEU1 cDNA clone (Cat# RC200386) using MegaTran 2.0 (Cat# [TT210002]).

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US