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 RC219858

NEU2 (NM_005383) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NEU2 (NM_005383) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NEU2
Synonyms:	SIAL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC219858 representing NM_005383
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTCCCTTCCTGTCCTGCAGAAGGAGAGCGTGTTCCAGTCGGGAGCCCATGCCTACAGAATCCCTG
CCCTGCTCTACCTGCCTGGGCAGCAGTCCCTGCTGGCCTTCGCGGAACAGCGGGCAAGCAAGAAGGATGA
GCACGCAGAGCTGATTGTCCTGCGCAGAGGAGACTACGACGCACCCACCCACCAGGTTCAGTGGCAAGCT
CAGGAGGTGGTGGCCCAGGCCCGGCTGGATGGCCACCGGTCCATGAACCCATGCCCCTTGTATGACGCGC
AGACGGGGACCCTCTTCCTCTTCTTCATTGCCATCCCTGGGCAAGTCACGGAGCAACAGCAGCTGCAGAC
CAGGGCCAATGTGACGCGGCTGTGCCAAGTCACCAGCACTGACCACGGGAGGACCTGGAGCTCCCCCAGA
GACCTCACTGATGCGGCCATCGGCCCAGCCTACCGGGAGTGGTCCACCTTTGCAGTGGGCCCGGGGCATT
GTTTGCAGCTTAACGACAGGGCCCGGAGCCTGGTGGTGCCCGCCTACGCCTACCGGAAACTTCACCCCAT
CCAAAGGCCGATCCCCTCTGCCTTCTGCTTCCTCAGCCATGACCATGGGCGCACGTGGGCGCGAGGGCAC
TTTGTGGCCCAGGACACCCTGGAGTGCCAGGTGGCCGAAGTCGAGACTGGGGAGCAGAGGGTGGTGACCC
TCAACGCGAGAAGCCACCTCCGAGCCAGGGTCCAGGCCCAGAGCACCAATGACGGGCTTGATTTCCAGGA
GTCTCAGCTGGTGAAGAAGCTGGTGGAGCCGCCGCCCCAGGGCTGCCAGGGGAGCGTCATCAGCTTCCCC
AGCCCCCGCTCGGGGCCTGGCTCCCCAGCCCAGTGGCTGCTCTACACTCACCCCACACACTCCTGGCAGA
GGGCCGACCTGGGTGCCTACCTCAACCCGCGACCTCCAGCCCCTGAGGCCTGGTCAGAGCCGGTACTGCT
GGCCAAGGGCAGCTGTGCCTACTCAGACCTCCAGAGCATGGGCACCGGCCCTGATGGGTCCCCCTTGTTT
GGGTGTCTGTACGAAGCCAATGATTACGAGGAGATTGTCTTTCTCATGTTCACCCTGAAGCAAGCCTTCC
CAGCTGAGTACCTGCCTCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC219858 representing NM_005383
Red=Cloning site Green=Tags(s)

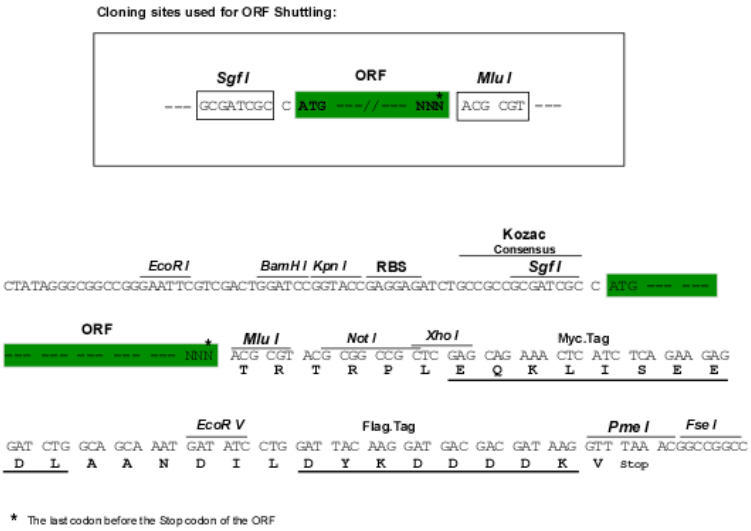
MASLPVLQKESVFQSGAHAYRIPALLYLPGQQSLLAFAEQRASKKDEHAELIVLRRGDYDAPTHQVQWQA
QEVVAQARLDGHRSMNPCPLYDAQTGTLFLFFIAIPGQVTEQQQLQTRANVTRLCQVTSTDHGRTWSSPR
DLTDAAIGPAYREWSTFAVGPGHCLQLNDRARSLVVPAYAYRKLHPIQRPIPSAFCFLSHDHGRTWARGH
FVAQDTLECQVAEVETGEQRVVTLNARSHLRARVQAQSTNDGLDFQESQLVKKLVEPPPQGCQGSVISFP
SPRSGPGSPAQWLLYTHPTHSWQRADLGAYLNPRPPAPEAWSEPVLLAKGSCAYSDLQSMGTGPDGSPLF
GCLYEANDYEEIVFLMFTLKQAFPAEYLPQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6094_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005383

ORF Size: 1140 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_005383.1, NP_005374.1

RefSeq Size: 1143 bp

RefSeq ORF: 1143 bp

Locus ID: 4759

UniProt ID: Q9Y3R4

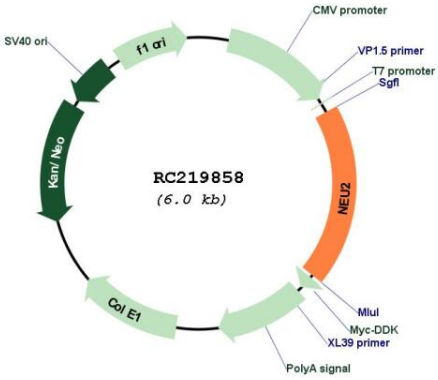
Cytogenetics: 2q37.1

Protein Pathways: Other glycan degradation, Sphingolipid metabolism

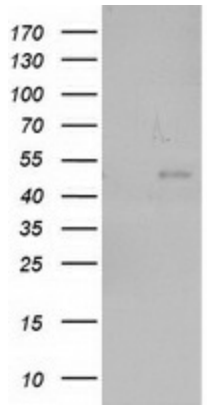
MW: 42.1 kDa

Gene Summary: This gene belongs to a family of glycohydrolytic enzymes which remove sialic acid residues from glycoproteins and glycolipids. Expression studies in COS7 cells confirmed that this gene encodes a functional sialidase. Its cytosolic localization was demonstrated by cell fractionation experiments. [provided by RefSeq, Jul 2008]

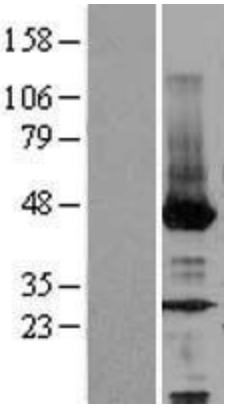
Product images:



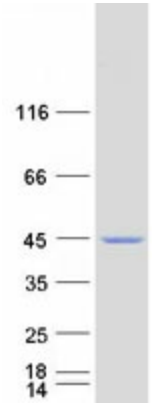
Circular map for RC219858



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NEU2 (Cat# RC219858, 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-NEU2(Cat# [TA502942]). Positive lysates [LY401652] (100ug) and [LC401652] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401652]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219858 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NEU2 protein (Cat# [TP319858]). The protein was produced from HEK293T cells transfected with NEU2 cDNA clone (Cat# RC219858) using MegaTran 2.0 (Cat# [TT210002]).