

Product datasheet for **RG213487**

NFH (NEFH) (NM_021076) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFH (NEFH) (NM_021076) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NFH
Synonyms:	CMT2CC; NFH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213487 representing NM_021076 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGAGCTTCGGCGCGCGGACGCGCTGCTGGGCGCCCGTTTCGCGCCGCTGCATGGCGGCGGCAGCC
TCCACTACGCGCTAGCCCGAAAGGGTGGCGCAGGCGGGACGCGCTCCGCCGCTGGCTCCTCCAGCGGCTT
CCACTCGTGGACACGGACGTCCGTGAGCTCCGTGTCGCCCTCGCCAGCCGCTTCCGTGGCGAGGCGCC
GCCTCAAGCACCGACTCGCTGGACACGCTGAGCAACGGGCGGAGGGCTGCATGGTGGCGGTGGCCACCT
CACGCAGTGAGAAGGAGCAGCTGCAGGCGCTGAACGACCGCTTCGCCGGTACATCGACAAGGTGCGGCA
GCTGGAGGCGCACAAACCGCAGCCTGGAGGGCGAGGCTGCGGCGCTGCGGCAGCAGCAGGCGGCCGCTCC
GCTATGGGCGAGCTGTACGAGCGCGAGGTCCGCGAGATGCGCGGCGCGGTGCTGCGCCTGGGCGCGGCGC
GCGGTACGCTACGCTGGAGCAGGAGCCTGCTCGAGGACATCGCGCACGTGCGCCAGCGCCTAGACGA
CGAGGCCCGCGCAGCGAGAGGAGGCCGAGGCGGCCGCGCGCTGGCGCGCTTCGCGCAGGAGGCCGAG
GCGGCGCGCGTGGACCTGCAGAAGAAGGCGCAGGCGCTGCAGGAGGAGTGGCGCTACCTGCGGCGCCACC
ACCAGGAAGAGGTGGGCGAGCTGCTCGGCCAGATCCAGGGCTCCGGCGCCGCGCAGGCGCAGATGCAGGC
CGAGACGCGCGACGCCCTGAAGTGCAGCTGACGTCGCGCTGCGCGAGATTCGCGCGCAGCTTGAAGGC
CACGCGGTGCAGAGCAGCTGACGTCGAGGAGTGGTCCGAGTGAAGGCTGGACCGACTGTCGGAGGCA
CCAAGGTGAACACAGACGCTATGCGCTCAGCGCAGGAGGAGATAACTGAGTACCGCGTCACTGCAGGC
CAGGACCACAGAGCTGGAGGCACTGAAAAGCACCAAGGACTCACTGGAGAGGCGAGCCTCTGAGCTGGAG
GACCGTACATCAGGCCGACATTGCTCCTACCAGGAAGCCATTGAGCAGCTGGACGCTGAGCTGAGGAACA
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TCAAAGTGGTGGAGAAGTCTGAGAAAGAACTGTGATTGTGGAGGAACAGACAGAGGAGACCCAAGTGAC
TGAAGAAGTGACTGAAGAAGAGGAGAAAGAGGCCAAAGAGGAGGAGGCCAAGGAGGAAGAAGGGGTGAA



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GAAGAGGAGGCAGAAGGGGGAGAAGAAGAAACAAAGTCTCCCCAGCAGAAGAGGCTGCATCCCCAGAGA
 AGGAAGCCAAGTACCAGTAAAGGAAGAGGCAAGTACCAGGCTGAGGCCAAGTCCCCAGAGAAGGAGGA
 AGCAAAATCCCCAGCCGAAGTCAAGTCCCCTGAGAAGGCCAAGTCTCCAGCAAAGGAAGAGGCAAGTCA
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 ACCCTCTCAAAGAGCCTAGCAAGCCTAAGGCAGAAAAGGCTGAAAAATCCTCCAGCACAGACCAAAAAG
 ACAGCAAGCCTCCAGAGAAGGCCACAGAAGACAAGGCCCGCCAAGGGGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213487 representing NM_021076
 Red=Cloning site Green=Tags(s)

MMSFGADALLGAPFAPLHGGSLHYALARKGGAGTRSAAGSSSGFHSWTRTSVSSVSASPSRFRGAGA
 ASSTDSLDTLSNGPEGCMVAVATSRSEKEQLQALNDRFAGYIDKVRQLEAHNRSLEGEAAALRQQAGRS
 AMGELYEREVREMRGAVLRLGAARGQLRLEQEHLLIEDIAHVQRQLDDEARQREEAEAAARALARFAQEAE
 AARVDLQKKAQALQEECGYLRRHHQEEVSELLGQIQGSGAAQAQMAETRDALKCDVTSALREIRAQLEG
 HAVQSTLQSEEFVRVRLDRLSEAAKVNVDAMRSAQEEITEYRRQLQARTTELEALKSTKDSLERQRSELE
 DRHQADIASYQEIQLDAELRNTKWEMAAQLREYQDLLNVKMALDIEIAAYRKLLEGEECRIGFGPIPF
 SLPEGLPKIPSVSTHIKVKSEEKIKVVEKSEKETVIVEEQTEETQVTEEVTEEEKEAKEEEGKEEEEGE
 EEEAEGGEEETKSPPAEEAASPEKEAKSPVKEEAKSPAEEKSPEKEEAKSPAEVKSPEKAKSPAKEEAKS
 PPEAKSPEKEEAKSPAEVKSPEKAKSPAKEEAKSPAEEKSPEKAKSPVKEEAKSPAEEKSPEKAKSPA
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 EAKSPEKAKSPVKEEAKSPEKAKSPVKEEAKTPEKAKSPVKEEAKSPEKAKSPEKAKTLDVKSPKTPA
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 KAEEEKAPATPKTEKKDSKKEEAPKKEAPKPKVEEKPEAVEKPKESKVEAKKEEAEDKKKVPTEPEKA
 PAKVEVKEDAKPKEKTEVAKKEPDDAKAKEPSKPAEKKEAAPEKKDTKEEKAKKPEEKPKTEAKAKEDDK
 TLSKESKPKAEKAEKSSSTDQKDSKPPEKATEDKAAKKGK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_021076

ORF Size: 3060 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:

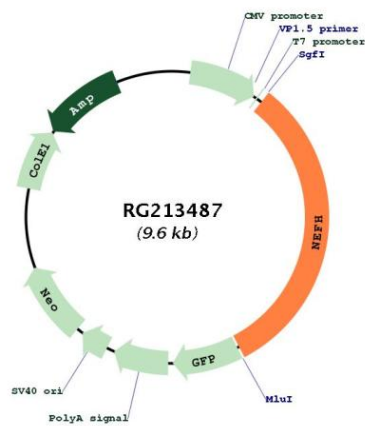
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_021076.4](#)

RefSeq Size: 3721 bp

RefSeq ORF:	3063 bp
Locus ID:	4744
UniProt ID:	P12036
Cytogenetics:	22q12.2
Domains:	filament
Protein Families:	Druggable Genome
Protein Pathways:	Amyotrophic lateral sclerosis (ALS)
Gene Summary:	Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and functionally maintain neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the heavy neurofilament protein. This protein is commonly used as a biomarker of neuronal damage and susceptibility to amyotrophic lateral sclerosis (ALS) has been associated with mutations in this gene. [provided by RefSeq, Oct 2008]

Product images:



Circular map for RG213487