

## Product datasheet for **RG233169**

### **NEDD4 2 (NEDD4L) (NM\_001243960) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NEDD4 2 (NEDD4L) (NM_001243960) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NEDD4L
Synonyms:	hNEDD4-2; NEDD4-2; NEDD4.2; PVNH7; RSP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG233169 representing NM\_001243960  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCGACCGGGCTCGGGGAGCCGGTCTATGGACTTTCGAAGACGAGGGAGAGTCCCGTATTCTCAGAG  
 TAAAAGTTGTTTCTGGAATTGATCTCGCCAAAAAGGACATCTTTGGAGCCAGTGATCCGTATGTGAAACT  
 TTCATTGTACGTAGCGGATGAGAATAGAGAACTTGCTTTGGTCCAGACAAAAACAATTAAGGACACTG  
 AACCCAAAATGGAATGAAGAATTTATTTAGGGTAAACCCATCTAATCACAGACTCCTATTGAAGTAT  
 TTGACGAAAAATAGACTGACACGAGACGACTTCTGGGCCAGGTGGACGTGCCCTTAGTCACCTCCGAC  
 AGAAGATCCAACCATGGAGCGACCCTATACATTTAAGGACTTCTCCTCAGACCAAGAAGTCATAAGTCT  
 CGAGTTAAGGGATTTTTCGATTGAAAAAGCCTATATGCCAAAAATGGAGGTCAAGATGAAGAAAAACA  
 GTGACCAGAGGGATGACATGGAGCATGGATGGGAAGTTGTTGACTCAAATGACTCGGCTTCTCAGCACCA  
 AGAGGAACCTCCTCCTCCTCTCGCTCCCGGTGGGAAGAAAAAGTGGACAATTTAGGCCGAACCTTAC  
 TATGTCAACCACAACAACCGGACCCTCAGTGGCACAGACCAAGCCTGATGGACGTGCTCCTCGGAGTCGG  
 ACAATAACATCAGACAGATCAACCAGGAGGCAGCACACCGGCGCTTCCGCTCCCGCAGGCACATCAGCGA  
 AGACTTGGAGCCCGAGCCCTCGGAGGGCGGGATGTCCCGAGCCTTGGGAGACCATTTAGAGGAAGTG  
 AATATCGCTGGAGACTCTCTCGGTCTGGCTCTGCCCCACCACCGGCTCCCGAGGATCTCGGACCAGCC  
 CTCAGGAGCTGTGAGGAACTAAGCAGAAGGCTTCCAGTCACTCCAGACTCCAATGGGGAACAGTTCAG  
 CTCTTTGATTCAAAGAGAACCCTCCTCAAGTTGAGGTGCAGTGTACCGACGCAGTGCAGAACAG  
 GGCCATCTACCACCGCTGCAGAAGATGGTCCGGATCAGCCAAAAACAGTAAACAACCATCTAATCG  
 AGCCTCAGATCCGCCGGCTCGTAGCCTCAGCTCGCCAACAGTAACTTTATCTGCCCGCTGGAGGGTGC  
 CAAGGACTCACCCGTACGTCCGGCTGTGAAAGACACCCTTTCCAACCCACAGTCCCCACAGCCATCACCT  
 TACAACCTCCCAACCAACAACAAAGTCAACAGAGCTTCTTCCACCGGCTGGGAAATGAGGATAG  
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 GAAGAAAGAAATCACTTGGATGGCCGACGTTTATATTGATCATAATAGCAAAATTAAGTGGGAAAG  
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 TGACTACTTCAGGAAGAAATTAAGAACTGCTGATATCCCAATAGGTTTGAATGAACTTCACAGA  
 AATAACATATTTGAAGAGTCTATCGGAGAATTATGTCGGTGAAGAACAGATGCTCTAAAAGCTAGAC  
 TGTGGATTGAGTTTGAATCAGAGAAAGGCTTGTACTATGGGGGTGTGGCCAGAGAATGGTCTTCTTACT  
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 ATCAACCCTAATTCAGGCCTCTGTAATGAGGATCATTGTCTACTTCACTTTTATTGGAAGAGTTGCTG  
 GTCTGGCCGATTTTATGGAAGCTCTTAGATGGTTTCTTATTAGACCATTTTACAAGATGATGTTGGG  
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 TGGATTTGAAGCCCAATGGTCCAGAAATATGGTCAAAAATGAAAACAAAAGGGAATATATCGACTTAGT  
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 CTTCTATTGATTTGATTAATAATTTTGTGAAAATGAGCTGGAGTTGCTCATGTGCGGCCCTCGGTGATG  
 TGGATGTGAATGACTGGAGACAGCATTCTATTTACAAGAACGGCTACTGCCCAAACCCCGCTATTCA  
 GTGTTTCTGGAAGGCTGTGCTACTCATGGACGCCGAAAAGCGTATCCGGTACTGCGATTTGTCACAGGG  
 ACATCGCGAGTACCTATGAATGGATTTGCCGAACCTTATGTTTCAATGGTCTCAGCTGTTTACAATAG  
 AGCAATGGGGCAGTCTGAGAACTGCCAGAGCTCACACATGCTTTAATCGCCTTGACTTACCTCCATA  
 TGAAACCTTTGAAGATTTACGAGAGAACTTCTCATGGCCGTGGAAAATGCTCAAGGATTTGAAGGGGTG  
 GAT

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – **GTTTAA**

**Protein Sequence:** >RG233169 representing NM\_001243960  
 Red=Cloning site Green=Tags(s)

MATGLGEPVYGLSEDEGESRILRVKVVSGIDLAKKIDIFGASDPYVKLSLYVADENRELALVQTKTIKKT  
 LNPKWNEEFYFRVNPNSNHRLLFEVFDENRLTRDDFLGQVDVPLSHLPTEDPTMERPYTFKDFLLRPRSHK  
 S RVKGFRLRLKMA YMPKNGGQDEENS DQRDDMEHGWEVVD S NDSASQHQEELPPPPLPPGWEEKVDNLGR  
 TY YVNHNNRTTQWHRPSLMDVSSSESDNNIRQINQEA AHRFRSRRHISEDLEPEPSEGGDVPEPWETISEE  
 V NIAGDSLGLALPPPASPGRSRTSPQELSEELSRRLQITPDSNGEQFSSLIQREPSRLRSCSVTDAVAEQ  
 GHLPPLAEDGASGATSNNHLEIPQIRPRSLSSPTVTL SAPLEGAKDSPVRRAVKDTLSNPQSPQSP  
 YNSPKPQHKTQSFLPPGWEMRIAPNGRPFIDHNTKTTTWEDPRLKFPVHMRSKTS LNPNDLGPLPPGW  
 EERIHLDRFTYIDHNSKITQWEDPRLQNPAITGPAVPYSREFKQKYDYFRKLLKPPADIPNRFEMKLHR  
 NNI FEE SYRRIMSVKRPDVLKARLWIEFESEKGLDYGGVAREWFFLLSKEMFNPPYYGLFEYSATDNYTLQ  
 INPNSGLCNEDHLSYFTFIGRVAGLAVFHGKLLDGGFFIRPFYKMLL GKQITLNDMESVDSEYYNSLKWIL  
 ENDPTELDLMFCDIEENFGQTYQVDLKPNGSEIMVTNENKREYIDLVIQWRFVNRVQKQMNAFLEGFTEL  
 LPIDLKIFDENELELLMCGLDVDVNDWRQHSIYKNGYCPNHPVIQWFWKAVLLMDAEKRIRLLQFVTG  
 T SRVPMNGFAEL YGSNGPQLFTIEQWGSPEKLPRAHTCFNRLDLPPYETFEDLREKLLMAVENAQGFEG  
 D

TRTRPLE – GFP Tag – V

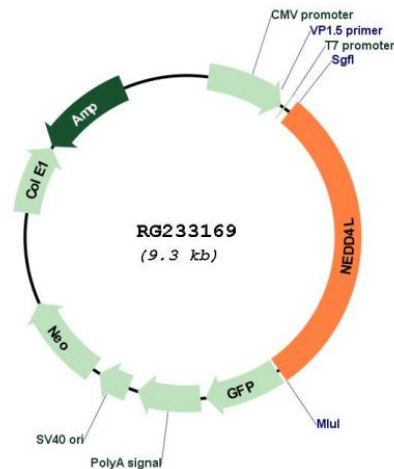
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_001243960

ORF Size: 2733 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\\_001243960.2](#)

RefSeq Size: 8290 bp

RefSeq ORF: 2736 bp

Locus ID: 23327

UniProt ID: [Q96PU5](#)

Cytogenetics: 18q21.31

**Protein Families:** Druggable Genome

**Protein Pathways:** Endocytosis, Ubiquitin mediated proteolysis

**Gene Summary:** This gene encodes a member of the Nedd4 family of HECT domain E3 ubiquitin ligases. HECT domain E3 ubiquitin ligases transfer ubiquitin from E2 ubiquitin-conjugating enzymes to protein substrates, thus targeting specific proteins for lysosomal degradation. The encoded protein mediates the ubiquitination of multiple target substrates and plays a critical role in epithelial sodium transport by regulating the cell surface expression of the epithelial sodium channel, ENaC. Single nucleotide polymorphisms in this gene may be associated with essential hypertension. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Mar 2012]