

Product datasheet for **RC209308**

RNF111 (NM_017610) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RNF111 (NM_017610) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RNF111
Synonyms:	ARK; hRNF111
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209308 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCTCAATGGACTCCTGAATAAAGGAGCTCTACACCTTAAAAGTGGATATGAAGAGTGAGATTCCTT
CTGATGCACCAAAGACACAGGAGAGTCTGAAAGGGATCCTTTTGCATCCAGAGCCATTGGGGCAGCCAA
AAGTTTTCTGCAGGAGTTGAGATGATTAATAGTAAAGTGGGAATGAATTCTCTCACCTGTGTGATGAT
TCTCAAAAGCAAGAGAAGGAAATGAATGGTAACCAGCAAGAACAAGAAAAAGTCTCGTTGTGAGGAAAA
AACGAAAAGCCAGCAGGCTGGCCCTTCGTATGTGCAGAATTGTGTTAAAGAAAACCAGGGAATATTAGG
ACTGAGGCAACACCTAGGACACCAAGTATGAAGATAATGATTCTCTTTAGTGATTGCTTTCTTCTCT
CCTTCTAGTCTGCATTTTGGGGATTCTGATACTGTGACTTCAGATGAGGATAAAGAAGTCTCTGTAA
GACATTCAGACCATTTTGAATGCTAAAAGTAGAAGCCATAGTGCACGGTCTCATAAGTGGCCTCGGAC
TGAGACAGAACTGTATCGGGATTGTTAATGAAAAGACCTGTTTACATGGCAGTTCGTTACGGAGACTT
CCATGCAGAAAGAGATTTGTAATAAATAATTCTCACAGAGGACACAGAAACAAAAGAGAGGATATTAA
TGCAGAGGAAGAAACGAGAAGTGTAGCTCGAAGAAAATATGCCTTGCTACCTAGTCTAGTGTCCAG
TGAGAATGACCTCAGCAGTGAATCCTCTCTAGCTCATCAACTGAAGGAGAAGAAGATTTGTTGTTCT
GCCAGTAAAACCACAAAACAATCCAGCTGTTCCCTCAGGAAGTATTGATGAAGATGTTGTGGTATAG
AAGCTTCTCCTCCTCCAGGTTACTGCCAATGAAGAAATTAATGTTACCTCAACTGACAGTGAAGTGA
GATTGTAACAGTTGGAGAAGCTATCGGTCTCGTTCAACCCTTGACACTCCAGATCTCATTGGAGCCAG
GGTTCCAGTTCTCATGCAAGTCGGCCACAGGAGCCACGGAACCGCAGTAGGATTTCTACTGTTATACAGC
CCTTGAGGCAGAAATGCAGCAGAAGTTGTGGACCTTACCGTTGATGAAGATGAACCTACTGTAGTACCAAC
CACTTCTGCAAGAATGGAATCACAAGCTACTAGCGCTTCCATTAACAATCAAATCCATCTACCTCTGAG
CAGGCCTCTGATACTGCTCAGCTGTACCAGTAGCCAACCTCCACAGTGTGAGAGACTTCAGCTACTC
TTACAAGCAATAGTACCACTGGCACTTCTATAGGAGATGACTCAAGGAGAACTACATCTAGTGTGTAAC
GAAAAGTGGCCCTCCTGCAATGCCAAGGTTACCTTCTGCTGTCCCAGCACTCACCATGTGGAGGTCG



[View online >](#)

TCACAGAACCACCATGCATTAGGACATCCTCATACAAGTTGCTTTTCAGCAGCATGGTCACCATTTTCAAC
 ATCATACCACCACCACCATACTCCCACCCAGCTGTCCAGTTTCTCCTTCTTTAGTGATCCTGCTTG
 CCCTGTGGAAAGACCTCCACAAGTACAAGCACCTTGTGGAGAAATAGTAGTTCTGGTACCAGCTATCAT
 GAACAGGCATTGCCAGTGGACCTGAGCAACAGTGGTATCAGAAGTCATGGAAGTGGCAGTTTTTATGGAG
 CATCTGCATTTGACCCCTGCTGCCCTGTTTCTCCTCCGAGCTGCAATCTTTGGCCATCAGGCCGCTGC
 TGCTGCCCCAAGTCAACCTTTATCATCAATAGATGGCTATGGATCAAGCATGGTTGCGCAGCCCCAGCCC
 CAGCCCCCTCCACAGCCCTCTCTCATCATGTGACATTACATGCCACCCCTTATGCCTCTTTGACAA
 GGCCACTTCATCATCAAGCTTCTGCCTGCCGCATTCTCATGAAACCCCTCCTCAGACTCAGCCTCC
 GCCTCAAGTGGATTATGTTATTCCTCATCTGTACATGCTTTCCATTCTCAAATATCTTCTCATGCAACA
 TCTCATCTGTGGACCCCCACCACCAACTCACTTAGCCAGTACAGCTGCACCAATCCCTCAGCATCTTC
 CTCCTACACACCAGCAAATTTGACCATATTCAGCCACAGCACCTCCAGCACAGAGACTGCATCTCA
 TGAAGTGTGCAGAGGATGGAAGTTCAAAGGAGGAGGATGATGCAGCATCCAACGCGGCACATGAACGC
 CCCCCACCCATCCACATAGGATGCACCCAAACTATGGTCATGGGCATCATATTCATGTGCCTCAGACTA
 TGTCTCATCTCCTGCAGAGCTCCAGAGAGGTCTGCCTGGAACTGGGAATTGAAGCTGGAGTGACTGC
 AGCTACTTATACACCTGGTGCATTGCATCTCACTTGGCCATTATCACGCACCTCCTCGACTTCATCAC
 TTACAATTAGGAGCTCTTCTTTAATGGTTCCTGATATGGCAGGCTATCCTCACATCCGTTACATTCAT
 CAGGATTGGATGGAACATCATTAGAGGTCCTTTTCAGGGCAATTTTGAGGAACTGATTCATTTGGAAGA
 AAGATTAGGCAATGTCAATCGTGGAGCATCCCAGGGGACAATTGAAAGATGTACATATCCACATAAATAC
 AAAAAGAGGAACTGCACTGCAACAAGATGGGGAAGAAGGGACTGAGGAAGACACAGAGGAAAAATGTA
 CTATCTGTTTGTCTATTTTAGAGGAAGGTGAAGATGTGAGACGCTTCCATGTATGCACCTTTTCCACCA
 AGTGTGTGTTGACCAATGGTTGATTACCAATAAGAAGTCCCCATATGCAGAGTGGACATTGAGGCCAG
 CTGCCAAGTAAAAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209308 protein sequence
 Red=Cloning site Green=Tags(s)

MSQWTPEYKELYTLKVDKSEIPSDAPKTQESLKGILLHPEPIGAASFPAGVEMINSKVGNEFSLHCDD
 SQKQEKEMNGNQEQEKSLVVRKKRKSQQAGPSYVQNCVKENQGLGLRQHLGTPSDEDNDSFSDCLSS
 PSSSLHFSDSTVTSDEDKEVSVRHSQTILNAKSRSHSARSHKWPRTEETESVSGLLMKRPCLHGSSLRRL
 PCRKRFPVKNSSQRTQKQKERILMQRKKREVLARRKYALLPSSSSSENDLSESSSSSSTEGEEDLFVS
 ASENHQNNPAVPSGSDIDEDVVVIEASSTPQVTANEEINVTSTDSEVEIVTVGESYRSRSTLGHRSRHSQ
 GSSSHASRPQEPNRSRISTVIQPLRQNAAEVVDLTVDEDEPTVVPTTSARMESQATSASINNSNPSTSE
 QASDTASAVTSSQPSTVSETSATLTSNSTTGTSGIDDSRRTTSSAVTETGPPAMPRLPSCCPQHSPCGGS
 SQNHHALGHPHTSCFQQHGHFHQHHHHHHHTHPAVPVSPFSDPACVERPPQVQAPCGANSSSGTSYH
 EQALPVDLSNSGIRSHGSGSFHGASAFDPCPVSSRAAIFGHQAAAAAPSQPLSSIDGYGSSMVAQPQP
 QPPPQPSLSSCRHYMPYPYASLTRPLHHQASACPHSHGNPPPTQPPPQVDYVIPHVPVAFHSQISSHAT
 SHPVAPPPPTHLASTAAPIPQHLPPTHQPISSHIPATAPPAQRLHPHEVMQRMVQRRRMMQHPTRAHER
 PPPPHRMPNYGHGHHIHPVQTMSSHPRQAPERSAWELGIEAGVTAATYTPGALHPLAHYHAPPRLHH
 LQLGALPLMVPDMAGYPHIRYISSGLDGTFRGPFGRNFEEILHLEERLGNVNRGASQGTIERCTYPHKY
 KKRKLHCKQDGEEGTEEDTEEKCTICLSILEEGEDVRRLLPCMHLFHQVCVDQWLI TNKKCPICRVDIEAQ
 LPSES

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6156_b05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_017610

ORF Size: 2955 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_017610.8](#)

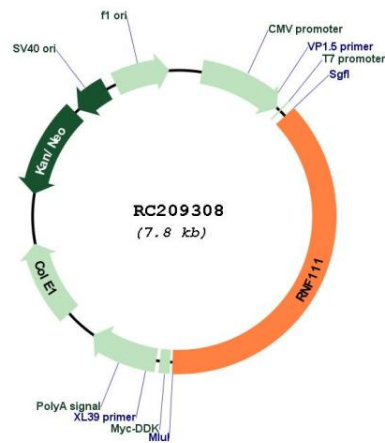
RefSeq Size: 5902 bp

RefSeq ORF: 2961 bp

Locus ID: 54778
UniProt ID: [Q6ZNA4](#)
Cytogenetics: 15q22.1-q22.2
Domains: RING
Protein Families: Druggable Genome
MW: 107.8 kDa

Gene Summary: The protein encoded by this gene is a nuclear RING-domain containing E3 ubiquitin ligase. This protein interacts with the transforming growth factor (TGF) -beta/NODAL signaling pathway by promoting the ubiquitination and proteosomal degradation of negative regulators, like SMAD proteins, and thereby enhances TGF-beta target-gene transcription. As a modulator of the nodal signaling cascade, this gene plays a critical role in the induction of mesoderm during embryonic development. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2012]

Product images:



Circular map for RC209308