

Product datasheet for **RC213843**

Nesprin 2 (SYNE2) (NM_182910) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nesprin 2 (SYNE2) (NM_182910) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nesprin 2
Synonyms:	EDMD5; KASH2; Nesp2; Nesprin-2; NUA; NUANCE; SYNE-2; TROPH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC213843 representing NM_182910
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAAGGTGACAGGAATGTTCCACCTGTTCCCCCTCGTCCAGCACCCCTTATAAACCACCTATGGAA
 AGCTACTATTACCTCCAGGCACGGATGGTGGCAAAGAAGGCCCGGAGTCTGAATGGCAACCCACAGCA
 GGAAGACGGGGACTGGCCGGTATCACAGAGCAGCAGTCAAGTGCCTTCGACAGATGGGAGATGATTCAA
 GCACAGGAGCTTCACAATAAGCTCAAAATAAAACAAAATTTGCAACAGCTGAACTCTGATATCAGCGCCA
 TCACTACTTGGCTGAAAAAACTGAAGCAGAGCTGGAAATGTTAAAGATGGCAAAGCCTCCCTCTGATAT
 CCAGGAAATAGAAGTGAAGAGTGAAGAGACTGCAGGAGATACTGAAAGCCTTTGACACTTACAAGGCATTA
 GTGGTCTCTGTCAACGTGAGCAGCAAGGAATTTCTGCAAACCGAGAGCCCGAATCCACAGAGCTCCAAA
 GTAGACTCCGCCAGCTGAGCCTGCTCTGGGAAGCAGCACAGGGCCGAGTGGACAGCTGGAGAGGGGGCTT
 ACGACAGTCGCTCATGCAGTGCCAGGGCTAAGACACGGCCGCGCTCTGATGTGTGTTTTTAAAGGAC
 TTCCACCAAGTTGAGTCAAAATCTGCTGTGTGGTTAGCGAGTGCCAAGAACCAGGAGCAGAAGGCTCATG
 TCACCGATCCAAAGGCAGACCCCGGGCTCCTAGAGTGTCCGAGGGAATAATGCAACTGGAAAAGGA
 GCTGGTAGAACGTCAACCTCAAGTGGACATGTTACAGGAGATTTCAAACAGCCTTCTCATTAAGGGACAT
 GGAGAAGACTGTATTGAAGCTGAAGAAAAGGTGCATGTTATTGAGAAGAACTCAAACAGTTACGGGAGC
 AAGTGTCCCAAGATTTAATGGCCTTGCAGGGAACCCAGAACCCAGCCTCACCCCTGCCAGCTTCGACGA
 GGTAGACTCGGGGACCAGCCTCCTGCAACATCCGTGCCAGCTCCCGAGCAAAGTTCAGAGCAGTGAGA
 ACTACAGAAGGCGAGGAGAGACAGAGAGCAGGGTCCCGGCAGCACACGGCCACAGCGCTCCTTCTCT
 CAAGGGTGGTCCGGGCAGCCCTACCCCTGCAGCTGCTCCTCCTGCTGCTGCTCCTGGCCTGCCTGCT
 GCCCTCCTCCGAAGAAGACTACAGCTGCAGTCAAGGCAACAACCTTGGCCCGTCCCTTTACCCCATGCTG
 AGGTACACCAATGGGCCACCCCCACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213843 representing NM_182910
 Red=Cloning site Green=Tags(s)

MEGDRNVPPVPPASSTPYKPPYGKLLLPPGTDGGKEGPRVLNPNPQQEDGGLAGITEQQSGAFDRWEMIQ
 AQELHNKLIKQNLQQLNSDISAITTWLKKTEAELEMLKMAKPPSDIQEIELRVKRLQEILKAFDITYKAL
 VVSVNVSSKEFLQTESPESTELQSRLRQLSLLWEAAQGAVDSWRGLRQSLMQCQGSKTRPRSDVLFKFD
 FHQLSQNLLLWLASAKNRRQKAHVTDPKADPRALLECRRELMQLEKELVERQPQVDMLQEI SNLLIKGH
 GEDCIEAEKVVHVEKLLKQLREQVSDLMALQGTQNPASPLPSFDEVSDGQPPATSVPAAPRAKFRVAVR
 TTEGEEETESRVPGSTRPQRSFLSRVRAALPLQLLLLLLLLLLACLPSSEEDYSCTQANNFARFYPML
 RYTNGPPPT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_182910

ORF Size: 1287 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_182910.2](#), [NP_878914.1](#)

RefSeq Size: 3103 bp

RefSeq ORF: 1290 bp

Locus ID: 23224

UniProt ID: [Q8WXH0](#)

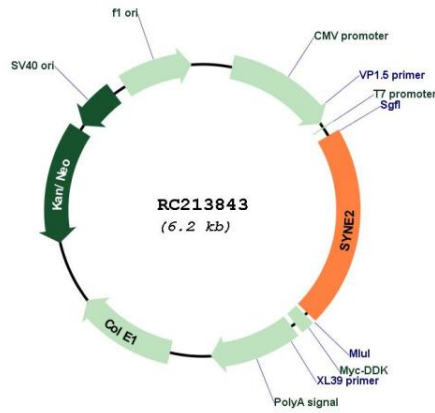
Cytogenetics: 14q23.2

Protein Families: Druggable Genome, Transcription Factors

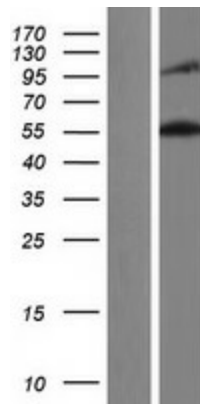
MW: 48 kDa

Gene Summary: The protein encoded by this gene is a nuclear outer membrane protein that binds cytoplasmic F-actin. This binding tethers the nucleus to the cytoskeleton and aids in the maintenance of the structural integrity of the nucleus. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

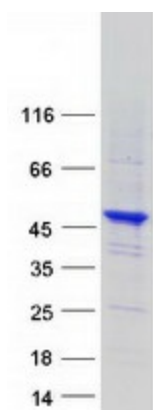
Product images:



Circular map for RC213843



Western blot validation of overexpression lysate (Cat# [LY405324]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213843 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SYNE2 protein (Cat# [TP313843]). The protein was produced from HEK293T cells transfected with SYNE2 cDNA clone (Cat# RC213843) using MegaTran 2.0 (Cat# [TT210002]).