

Product datasheet for **RC221723**

Annexin VII (ANXA7) (NM_004034) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Annexin VII (ANXA7) (NM_004034) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Annexin VII
Synonyms:	ANX7; SNX; SYNEXIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221723 representing NM_004034
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCATACCCAGGCTATCCCCAACAGGCTACCCACCTTCCCTGGATATCCTCCTGCAGTCCAGGAGT
 CATCTTTTCCCCCTTCTGGTCAGTATCCTTATCCTAGTGGCTTTCTCCAATGGGAGGAGTGCCTACCC
 ACAAGTGCCAAGTAGTGGCTACCCAGGAGCTGGAGGCTACCCTGCGCCTGGAGGTTATCCAGCCCCGGA
 GGCTATCCTGGTGCCCCACAGCCAGGGGAGCTCCATCCTATCCCGGAGTTCTCCAGGCCAAGGATTTG
 GAGTCCCACCAGGTGGAGCAGGCTTTTCTGGGTATCCACAGCCACCTTACAGTCTTATGGAGGTGGTCC
 AGCACAGTTCCTACTACCTGGTGGCTTTCTGGAGGACAGATGCCTTCTCAGTATCCTGGAGGACAACT
 ACTTACCCTAGTCAGATCAATACAGATTCTTTTCTTCTATCCTGTTTTCTCCTGTTTTCTTGGATT
 ATAGCAGTGAACCTGCCACAGTACTCAGGTCACTCAAGGAATATCCGACCAGCTGCCAATTCGATGC
 TATAAGAGATGCAGAAATCTTCGTAAGGCAATGAAGGGTTTTGGGACAGATGAGCAGGCAATTGGAT
 GTGGTGGCCAACCGTTCCAATGATCAGAGGCAAAAAATTAAGCAGCATTAAAGACCTCCTATGGCAAGG
 ATTTAATCAAAGATCTCAAATCAGAGTTAAGTGAAATATGGAAGAACTGATCCTGGCCCTCTTCATGCC
 TCCTACGTATTACGATGCCTGGAGCTTACGAAAGCAATGCAGGGAGCAGGAACTCAGGAACGTGTATTG
 ATTGAGATTTTGTGCACAAGAACAATCAGGAAATCCGAGAAATGTCAGATGTTATCAGTCAGAATTTG
 GACGAGACCTTGAAGGACATTAGGTCAGATACATCAGGACATTTTGAACGTTTACTTGTGTCCATGTG
 CCAGGGAAATCGTGATGAGAACCAGAGTATAAACCACCAATGGCTCAGGAAGATGCTCAGCGTCTCTAT
 CAAGCTGGTGAGGGGAGACTAGGGACCGATGAATCTTGCCTTAAACATGATCCTTGCCACAAGAAGCTTTC
 CTCAGCTGAGAGCTACCATGGAGCTTATTCTAGGATGGCTAATCGAGACTTGTTAAGCAGTGTGAGCCG
 TGAGTTTTCCGGATATGTAGAAAGTGGTTTGAAGACCATCTTGAGTGTGCCCTGAACCGCCTGCCTTC
 TTTGCTGAGAGGCTCTACTATGCTATGAAAGGTGCTGGCACAGATGACTCCACCCTGGTCCGGATTGTGG
 TCACTCGAAGTGAGATTGACCTTGTACAAATAAACAGATGTTTCGCTCAGATGTATCAGAAGACTCTGGG
 CACAATGATTGCAGGTGACACGAGTGGAGATTACCGAAGACTTCTTCTGGCTATTGTGGCCAG

ACCGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221723 representing NM_004034
 Red=Cloning site Green=Tags(s)

MSYPGYPPTGYPPFPGYPPAGQESSFPPSGQYPYPSGFPPMGGGAYPQVPSSGYPGAGGYPAPGGYPAPG
 GYPGAPQPGGAPSYPGVPPGQGFVPPGGAGFSGYPQPPSQSYGGGPAQVPLPGGFPGGQMPQSYPGGQP
 TYPQINTDSFSSYPVFSVSLDYSSEPATVTQVTQGTIRPAANFDAIRDAEILRKAMKGFGTDEQAIVD
 VVANRSDQRQKIKAAFKTSYKDLIKDLKSELSGNMEELILALFMPPTYDASLRKAMQAGTQERVL
 IEILCTRINQEIREIVRCYQSEFGRDLEKDIRSDTSGHFERLLVSMCQGNRDNQNSINHQMAQEDAQRLY
 QAGEGRLGTDESCFNMILATRSFPQLRATMEAYSRRMANRDLLSSVSREFSGYVESGLKTLILQCALNRPAF
 FAERLYYAMKGAGTDDSTLVRIVVTRSEIDLQVQKMFQMYQKTLGTMIAAGDTSGDYRRLLLAIVGQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6476_f11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_004034

ORF Size: 1464 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_004034.4](#)

RefSeq Size: 2176 bp

RefSeq ORF: 1467 bp

Locus ID: 310

UniProt ID: [P20073](#)

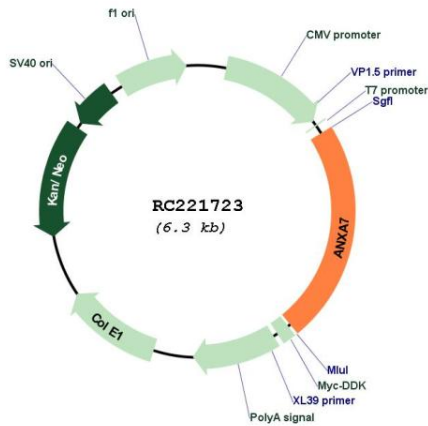
Cytogenetics: 10q22.2

Domains: annexin

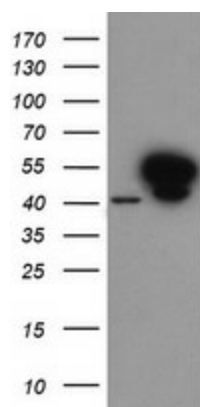
MW: 52.6 kDa

Gene Summary: Annexin VII is a member of the annexin family of calcium-dependent phospholipid binding proteins. The Annexin VII gene contains 14 exons and spans approximately 34 kb of DNA. An alternatively spliced cassette exon results in two mRNA transcripts of 2.0 and 2.4 kb which are predicted to generate two protein isoforms differing in their N-terminal domain. The alternative splicing event is tissue specific and the mRNA containing the cassette exon is prevalent in brain, heart and skeletal muscle. The transcripts also differ in their 3'-non coding regions by the use of two alternative poly(A) signals. Annexin VII encodes a protein with a molecular weight of approximately 51 kDa with a unique, highly hydrophobic N-terminal domain of 167 amino acids and a conserved C-terminal region of 299 amino acids. The latter domain is composed of alternating hydrophobic and hydrophilic segments. Structural analysis of the protein suggests that Annexin VII is a membrane binding protein with diverse properties, including voltage-sensitive calcium channel activity, ion selectivity and membrane fusion. [provided by RefSeq, Jul 2008]

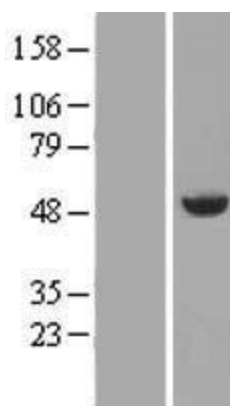
Product images:



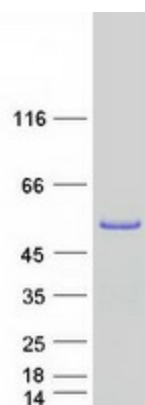
Circular map for RC221723



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ANXA7 (Cat# RC221723, 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-ANXA7 (Cat# [TA504925]). Positive lysates [LY418291] (100ug) and [LC418291] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418291]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221723 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ANXA7 protein (Cat# [TP321723]). The protein was produced from HEK293T cells transfected with ANXA7 cDNA clone (Cat# RC221723) using MegaTran 2.0 (Cat# [TT210002]).