

Product datasheet for **SC127419**

Ankyrin brain (ANK2) (NM_020977) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ankyrin brain (ANK2) (NM_020977) Human Untagged Clone
Tag:	Tag Free
Symbol:	Ankyrin brain
Synonyms:	ANK-2; brank-2; CFAP87; FAP87; LQT4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_020977, the custom clone sequence may differ by one or more nucleotides

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ATGATGAACGAAGATGCAGCTCAGAAAAGCGACAGTGGAGAGAAGTTCAACGGCAGTAGTCAGAGGAGAA
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**5' Read Nucleotide
 Sequence:**

>OriGene 5' read for NM_020977 unedited
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 TCTGCCACTAAGAAGGGAATACCGCTCTTACATTGCATCTTTGGCTGGACAAGCAGAA
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 CAGCAAGGACACAACCAGGCGGTGGCCATCCTCTTGGAGAATGACACCAAAGGGAAGTG
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 CTTCAGAATGACCACAATGCTGACGTACAATCCAAGAGTGGTTTTACCCCTTTGCACATA
 GCTGCACATTACGGGAATGTCAACGTGGCAACTCTTCTTAAACGGGAGCTGCTGTGG
 ACTCACAGCCAGGATGGGATCACTCCTCTGCATGTGGCTTCAAAGAAGAATAACAATGT
 GAGCTCNACTGGATCGAGCGTCAGACGTGCCAACTAGGNATGGTGACCCATT

**3' Read Nucleotide
 Sequence:**

>OriGene 3' read for NM_020977 unedited
 GCCGCCTACAGGCNAAAGCCGTCTTTTTTCCCCCCCCCGGGTACGGNCTNAAAAACCC
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 TTAATAATACATGCCCTCATAGATATATCAATTAGTGTATACCATGGGAACAAGAT
 GCTGATTTCGTAACCTGGAATAATCACTTCTTCTCACAGTATTCAAGTTTTTGATAACACA
 GCAAAAATCAAAAATCAAAAATGTTAATAACCATTATGTTGTTACACAGACATCATCTG
 CACTGCAATAACACAACAGAAATGCTTTTCTTGAGCTCCAGTGAAGTTTTGACAAGAA
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 CAGGAAAAGACCACATAATTGGAAAATGCTCACTCCCTGGAGGATACACCCTGCCCTTTT
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 CTCTGCAACCCCAATCCCTATCGCCCATATGCCCTTATAAATCCCCACGGCGGTGCGC
 CCTTCAATTTAAACCCCAATATNTTACCAAACCCTAACTCTCTACGGTTTCCCCCCC
 CCCATCGTTCCTCACAACCAATCT

Restriction Sites:

NotI-NotI

ACCN:

NM_020977

Insert Size:

7680 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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_020977.2 , NP_066187.2
RefSeq Size:	7911 bp
RefSeq ORF:	5619 bp
Locus ID:	287
UniProt ID:	Q01484
Cytogenetics:	4q25-q26
Domains:	DEATH, ZU5, ANK
Protein Families:	Druggable Genome
Gene Summary:	<p>This gene encodes a member of the ankyrin family of proteins that link the integral membrane proteins to the underlying spectrin-actin cytoskeleton. Ankyrins play key roles in activities such as cell motility, activation, proliferation, contact and the maintenance of specialized membrane domains. Most ankyrins are typically composed of three structural domains: an amino-terminal domain containing multiple ankyrin repeats; a central region with a highly conserved spectrin binding domain; and a carboxy-terminal regulatory domain which is the least conserved and subject to variation. The protein encoded by this gene is required for targeting and stability of Na/Ca exchanger 1 in cardiomyocytes. Mutations in this gene cause long QT syndrome 4 and cardiac arrhythmia syndrome. Multiple transcript variants encoding different isoforms have been described. [provided by RefSeq, Dec 2011]</p> <p>Transcript Variant: This variant (2) lacks an in-frame exon in the coding region, compared to variant 1. It encodes isoform 2 which is shorter than isoform 1. Isoform 2 is the major form of ankyrin in adult brain.</p>