

Product datasheet for SC304774

ANK1 (NM_020475) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ANK1 (NM_020475) Human Untagged Clone
Tag:	Tag Free
Symbol:	ANK1
Synonyms:	ANK; SPH1; SPH2
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_020475, the custom clone sequence may differ by one or more nucleotides

```

ATGCCCTATTCTGTGGGCTTCCGCGAAGCCGATGCTGCTACCAGCTTTCTGAGAGCAGCA
AGATCAGGTAACCTGGACAAAGCTTTGGATCACCTGCGGAATGGGGTAGATATTAACACC
TGTAACCAAGAATGGGTTGAATGGCTTGCATCTGGCTTCTAAGGAAGGCCATGTGAAAATG
GTGGTTGAACTTCTGCACAAAGAAATCATTCTAGAAACGACAACCAAGAAGGGGAACAGC
GCCCTGCACATCGCTGCTCTAGCCGGGCAGGATGAGGTGGTCCGGGAGCTTGTCAACTAT
GGAGCCAACGTCAACGCCAGTCACAGAAAGTTTTACACCCCTGTACATGGCAGCACAA
GAGAACCACCTTGAAGTGGTTAAGTTTTACTGGAAAATGGAGCTAACCAAGATGTAGCC
ACAGAAGACGGCTTACGCCTCTGGCGGTAGCCCTGCAGCAGGGCCATGAGAACGTGCTC
GGCACCTCATCAACTACGGCACCAAGGGGAAGGTGCGCCTCCCGGCCCTGCACATCGCG
GCCCGCAACGACGACACGCGCACGGCTGCGGTGCTGCTGCAGAACGACCCCAACCCGGAC
GTGCTTTCCAAGACGGGATTCACGCCCTGCACATTGCGGCTCACTACGAGAACCTCAAC
GTGGCCAGTTGCTCCTCAACAGAGGAGCCAGCGTCAATTTACACCACAGAACGGCATC
ACGCCACTGCACATCGCTCCCGCAGGGGCAACGTGATCATGGTGGCGCTGCTGCTGGAT
CGGGGAGCCCAGATAGAAACCAAGACCAAGGACGAATTGACACCTCTCCACTGTGCAGCT
CGAAATGGGCACGTGCGAATCTCAGAGATCCTGCTGGACCACGGGGCACCAATCCAAGCC
AAAACCAAGAACGGCCTGTCCCAATTCACATGGCGGCTCAGGGAGACCACCTCGACTGT
GTCCGGCTCCTGTTGCAATACGACGCAGAGATAGACGACATCACCTGGACCACCTGACC
CCTCCACGTGGCTGCCACTGTGGACACCACAGGGTGGCTAAGGTCTTCTGGATAAA
GGGGCCAAACCAACTCCAGAGCCCTGAATGGCTTTACCCCTTACACATCGCTGCAAA
AAGAACCACGTCCGTGTCATGGAGCTGCTGCTGAAGACGGGAGCCTCGATCGACGGGTC
ACCGAGTCTGGCCTGACACCTCTCCACGTGGCCTCCTTATGGGGACCTTCCCATCGTG
AAGAACCTCCTGCAGCGGGGGCGTCGCCAACGTCTCCAACGTGAAAGTGGAGACCCCG
CTACACATGGCAGCCAGGCCGGGCACACGGAAGTGGCCAAATATTTACTCCAGAACAAA
GCCAAAGTCAATGCCAAGCCAAGGATGACCAGACCCACTTCACTGTGCAGCTCGCATC
GGCCACACAAACATGGTGAAGCTCCTGCTGAAAATAACGCCAACCCCAACCTGGCCACC
ACCGCCGGGCACACCCCTGCACATTGCAGCCGTGAGGGCCATGTGAAAACAGTCTGTG
GCCCTTCTGAAAAGGAAGCATCCAGGCCTGCATGACCAAGAAAGGATTTACCCCTCTG
CACGTGGCGGCCAAGTACGGGAAGGTGCGGGTGGCAGAGCTGCTGCTGGAGCGGGACGCA
CACCCGAATGCTGCCGAAAAAATGGCCTGACCCCTGCACGTGGCCGTCCATCACAAC

```



[View online »](#)

AACCTGGACATCGTCAAGCTGCTGCTTCCCCGGGGCGGCTCCCCGCACAGCCCTGCCTGG
AATGGCTACACCCCTTTGCACATCGCTGCCAAGCAGAACCAGGTGGAGGTGGCCCGTAGT
CTGCTGCAGTATGGGGGCTCAGCAAACGCCGAGTCGGTGCAAGGTGTGACGCCCTTAC
CTGGCCGCCCAGGAGGGCCACGCAGAGATGGTGGCTCTGCTGCTCTGAAACAAGCCAAT
GGCAACCTGGGGAACAAGAGCGGACTCACTCCCCTCCATCTGGTAGCACAAGAAGCCAC
GTTCCAGTGGCAGATGTGCTGATCAAACACGGCGTCATGGTGGACGCCACCACCCGGATG
GGCTACACTCCCCTCCATGTGGCCAGTCACTATGGAACATCAAGCTGGTGAAGTTCTG
CTGCAGCACCCAGGCAGATGTCAATGCCAAGACCAAGCTAGGATACAGCCCCTGCACCAG
GCAGCCCAGCAGGGACACACAGACATCGTGACTCTGCTTCTGAAAAACGGTGCTTCCCCA
AACGAGGTCAGCTCGGATGGAACCAACCTCTGGCCATAGCCAAGCGCTTGGGCTACATT
TCTGTACCCGACGTGCTCAAGGTCGTACGGATGAAACCAGTTTCGTGTTAGTCAGTGAT
AAGCATCGAATGAGTTTCCCTGAGACAGTTGATGAGATCCTGGATGTCTCGGAAGATGAA
GGGAAGAAGTCAACAGTTCAAGGCTGAGAGGCGGGATTCCAGGGATGTTGATGAAGAG
AAGGAGCTGCTGGATTTTGTGCCGAAGCTAGACCAAGTGGTGAATCTCCAGCCATCCCC
AGGATTCCTGTGCCATGCCTGAGACAGTGGTGTATCAGGTCAGAAGAGCAGGAGCAGGCA
TCTAAAGAGTATGATGAGGACTCCCTCATCCCCAGCAGCCCGGCCACCGAGACCTCAGAC
AACATCAGCCCGGTGGCCAGCCCGGTGCATACAGGGTTTCTGGTGAAGTTTCTGTTGAC
GCCCGGGTGGTTCCATGAGAGGAAGTCGCCACAACGGCCTGCGAGTGGTGTATCCCGCA
CGGACGTGCGCAGCGCCACCCGCATCACTGCCGCTGGTCAAGCCCCAGAAGCTCAGC
ACGCCGCCCCACTGGCCGAGGAGGAGGGCCTGGCCAGCAGGATCATAGCACTGGGGCCC
ACGGGGGCACAGTTTCTGAGCCCTGTAATCGTGGAGATCCCGCACTTTCCTCCATGGC
CGTGGAGACCCGAGCTCGTGGTTCTGAGGAGCGAAAACGGCTCCGTGTGGAAGGAGCAC
AGGAGCCGCTATGAGAGAGCTACCTGGATCAGATCCTCAACGGGATGGACGAAGAGCTG
GGGAGCCTGGAGGAGCTAGAGAAGAAGGGGTGCGCCAATCATACCACCGACTTCCCCG
CTGTAATTCGTGATCATGTACGGCTCTGCCAGGACTACGACACCATCGGTCCCCAAGGG
GGCTCCCTGAAGAGCAAGCTGGTGGCCCTGGTACAGGCAACGTTCCCGGAGAATGCCGTC
ACCAAGAGAGTGAAGCTGGCTCTGCAGGCCAGCCTGTCCCGGATGAGCTTGTACTAAG
CTCCTGGGCAACCAGGCCACATTAGCCCCATTGTACCCGTGGAGCCCCGGCGCCGAAG
TTCCACCCGCCATTGGGCTTCGGATCCCACTACCTCCTTCTGGACCGACAACCCGAGG
GACAGCGGGGAGGAGACACCACCAGCCTGCGCCTGCTTTGCAGCGTCATTGGAGGAACA
GACCAAGCCAGTGGGAAGACATAACAGGAACCACAACTTGTATATGCCAACGAGTGC
GCCAATTCACCCCAATGTCTCTGCCAGGTTTTGGCTGTGCGACTGTCTCGGACTGCT
GAGGCTGTGAACCTTGGCCACCCTGCTGTACAAAGAGCTCACTGCAGTGCCTACATGGCC
AAATTCGTCACTTTGCCAAGATGAATGACCCCGAGAGGGGGCGCCTGCGCTGCTACTGC
ATGACAGATGATAAAGTGGACAAGACCCTGGAGCAGCATGAGAATTCGTGGAGGTGGCC
CGGAGCAGGGACATAGAGGTGTTGGAAGGAATGTCCCTGTTTGCAGAACTCTCTGGGAAC
CTGGTGCCTGTGAAGAAAGCTGCCCAGCAGCGGAGCTTCCACTCCAGTCATTTCCGGGAG
AACCGTCTGGCCATGCCTGTAAGGTGAGGGACAGCAGTCGAGAGCCGGGAGGGTCCCTG
TCGTTTTCTGCCAAGGCATGAAGTACGAGGACACCCAGCACATTCTCTGCCACCTGAAC
ATCACCATGCCCCCTGCGCCAAGGGAAGTGGAGCCGAAGATAGGAGAAGGACCCCGAGC
CCCCTGGCCCTGCGATACAGATTCTCAGTGAGTCCACACCAGGTTCTCTCAGTGGGACA
GAGCAGGCAGAGATGAAGATGGCTGTTATCTCAGAGCACCTCGGTCTCAGCTGGGCAGAG
TTGGCCCCGGAGCTGCAGTTCAGTGTGGAAGACATCAACAGGATCCGAGTGGAAAATCCC
AACTCCCTGTTGGAGCAGAGTGTGGCCTTGCTGAACCTCTGGGTCATCCGTGAAGGCCAA
AACGCAACATGGAGAATCTGTACACAGCCCTGCAGAGCATTGACCGTGGCGAGATCGTG
AACATGCTGGAGGTTCCGGCCGACAGAGCCGCAACTTGAAGCCAGACAGCGGCACACC
GACCGCGACTACTCGCTGTACCCTCCCAGATGAATGGTTACTCCTCACTGCAGGACGAG
CTGCTGTCCCCTGCCTCCCTGGGCTGTGCACTTTCCTCTCCGCTACGTGCAGACCAGTAC
TGGAAATGAGGTGGCCGCTCTAGACGCCATCCCCTTGGCGGCCACGGAGCATGACACCATG
CTGGAGATGTCTGACATGCAGGTGTGGTCTGCGGGCCTCACGCCTTCTCTGGTCACTGCT
GAGGACTCCTCTCTGGAGTGTAGCAAGGCTGAGGACTCTGATGCCACAGGTACAGAGTGG
AAGTTGGAGGGGGCACTCTCAGAGGAACCGGGGGCCCGAGTTGGGCTCTCTGGAACCT

```

GTGGAGGACGACACAGTGGATTCAGATGCCACAAATGGCCTTATCGATTTGCTTGAACAG
GAGGAAGGTCAGAGGTCAGAAGAGAAGCTGCCAGGTTCTAAGAGGCAGGATGACGCGACA
GGTGCAGGGCAGGACTCAGAGAAATGAAGTGTCTTTGTTTCAGGCCATCAGAGGGGGCAA
GCCCGAATCACACATTCACCGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGT
CAGGACTGGGATGCAGACGGCTCGATTGTCTCATACCTGCAAGATGCTGCACAAGTTCC
TGGCAAGAGGAGGTCACGCAAGGTCCACACTCATTCCAGGGAACAAGTACCATGACTGAA
GGGCTAGAGCCCCGGTGGATCTCAGGAGTACGAGAAGGTCCTGGTGTCTGTAAGTGAGCAC
ACGTGGACAGAACAGCCCGAGGCTGAGAGCTCCCAGGCCGACAGGGACCGGAGGCAGCAA
GGCCAAGAAGAGCAGGTGCAGGAGGCCAAGAACCTTACCCAAAGTGGTGCAGGGGAAT
GAGTTTCAGAATATTCCAGGGGAGCAGGTGACAGAGGAGCAATTACGGATGAGCAGGGC
AACATTGTACCAAGAAGATCATTTCGCAAGGTGGTTTCGACAGATAGACTTGTCCAGCGCC
GATGCCGCCAGGAGCACGAGGAGGATCACACCTCGACACCCAACCCCTGA

```

Restriction Sites:	Please inquire
ACCN:	NM_020475
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>NM_020475.2</u> , <u>NP_065208.2</u>
RefSeq Size:	8165 bp
RefSeq ORF:	5571 bp
Locus ID:	286
UniProt ID:	<u>P16157</u>
Cytogenetics:	8p11.21
Protein Families:	Transmembrane

Gene Summary:

Ankyrins are a family of proteins that link the integral membrane proteins to the underlying spectrin-actin cytoskeleton and play key roles in activities such as cell motility, activation, proliferation, contact and the maintenance of specialized membrane domains. Multiple isoforms of ankyrin with different affinities for various target proteins are expressed in a tissue-specific, developmentally regulated manner. 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. Ankyrin 1, the prototype of this family, was first discovered in the erythrocytes, but since has also been found in brain and muscles. Mutations in erythrocytic ankyrin 1 have been associated in approximately half of all patients with hereditary spherocytosis. Complex patterns of alternative splicing in the regulatory domain, giving rise to different isoforms of ankyrin 1 have been described. Truncated muscle-specific isoforms of ankyrin 1 resulting from usage of an alternate promoter have also been identified. [provided by RefSeq, Dec 2008]

Transcript Variant: This variant (4) lacks an in-frame segment in the 3' coding region, compared to variant 1. The resulting isoform (4) is therefore shorter than isoform 1.