

Product datasheet for **SC127754**

Alpha Fodrin (SPTAN1) (NM_003127) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Alpha Fodrin (SPTAN1) (NM_003127) Human Untagged Clone
Tag:	Tag Free
Symbol:	Alpha Fodrin
Synonyms:	DEE5; EIEE5; NEAS; SPTA2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC127754 sequence for NM_003127 edited (data generated by NextGen Sequencing)

```

ATGGACCCAAGTGGGGTCAAAGTCTGGAACAGCAGAGGACATCCAGGAGAGGCGGCAG
CAGGTCCTAGACCGATACCACCGCTTCAAGGAAGTCTCAACCCTTAGCGTCAGAAGCTG
GAAGATTCCTATCGATTCCAGTTCTTTCAAAGAGATGCTGAAGAGCTGGAGAAATGGATA
CAGGAAAACTTCAGATTGCATCTGATGAGAATTATAAAGACCAACCACTTGCAGGGA
AAGCTTCAGAAGCATCAAGCATTGAAGCTGAAGTGCAGGCCAACTCAGGAGCCATTGTT
AAGCTGGATGAACTGGAAACCTGATGATCTCAGAAGGGCATTTCATCTGAAACCATA
CGGACCCGTTTGATGGAGCTGCACCGCCAGTGGGAATTACTTTTGGAGAAGATGCGAGAA
AAAGGAATCAAAGTCTGCAGGCCAGAAAGTTGGTGCAGTACTTACGAGAATGTGAGGAC
GTGATGGACTGGATCAATGACAAGGAAGCAATTGTTACTTCTGAAGAGCTGGGCCAGGAT
CTGGAGCATGTAGAGTTTTACAGAAGAAATTTGAAGAGTTTCAAACAGATATGGCTGCT
CATGAAGAAAGAGTTAATGAAGTGAACCAAGTTTCTGCTGCCAACTCATACAGGAGCAGCAC
CCTGAGGAGGAAGTCAAGACTAAGCAGGATGAAGTCAATGCAGCCTGGCAGCGGCTG
AAGGGCTGGCTCTGCAGAGGCAGGGGAAGCTCTTTGGGGCAGCAGAAGTTCAGCGCTTT
AACAGGGATGTGGATGAGACTATCAGTTGGATTAAGGAAAAGGAGCAGTTAATGGCCTCT
GATGATTTTGGCCGAGACCTGGCAAGTGTTCAGGCTCTGCTTCGGAAGCACGAGGGTCTG
GAGAGAGATCTTGCTGCTCTAGAAGACAAGGTCAAAGCCCTGTGTGCTGAGGCTGACCCG
CTGCAACAGTCCCACCTCTGAGTGAACACAGATTCAAGTGAAGCGAGAGGAAGTCAATGATTCA
ACAAACTGGGAGCAGATCCGACCTTGGCGGCAGAGAGACATGCACGGCTCAATGATTCA
TACAGGCTTCAACGCTTCCCTTGCTGACTTCCGTGACCTCACCAGCTGGGTGACTGAGATG
AAAGCCCTCATCAATGCAGATGAGCTTGCCAGTGTGGCTGGGGCTGAAGCCCTGCTA
GATAGACACCAAGAGCACAAGGGTGAATTTGATGCCCATGAAGACAGCTTCAAATCTGCA
GATGAATCTGGACAGGCACTGCTTGCTGCTGGTCACTATGCCTCAGATGAAGTGAAGGAG
AAGCTGACCGTCTTTCCGAGGAGAGAGCGGCGTCTGGAGCTGTGGGAGCTGCGCAGG
CAGCAGTACGAGCAGTGCATGGACCTGCAGCTCTTCTACCGGGACTGAGCAGGTGGAC
AACTGGATGAGCAAGCAGGAGGCGTTCCTGTTGAATGAAGACTTGGGAGATTCCTTGGAT

```



[View online »](#)

AGTGTGGAAGCGCTTCTTAAGAAGCACGAAGACTTTGAGAAATCCCTTAGTGCCAGGAG
 GAAAAGATTACAGCATTAGATGAATTTGCAACCAAGCTAATTCAGAACCAACTATGCA
 ATGGAAGATGTGGCCACTCGCCGAGATGCTCTGTTGAGCCGCCGAATGCCCTTCACGAG
 AGAGCCATGCGTCGCCGGGCCAGCTAGCCGATTTTCCATCTGCAGCAGTTTTCCGT
 GATTCTGATGAGCTCAAGAGTTGGTCAATGAGAAGATGAAAACGCCACAGATGAAGCT
 TATAAAGATCCATCCAACCTACAAGGAAAAGTACAGAAGCATCAGGCTTTTGAGGCTGAG
 CTCTCAGCAAACAGAGCCGAATTGATGCCTTGGAGAAAGCTGGCCAAAAGCTGATTGAT
 GTC AACCACTATGCCAAGGATGAAGTGGCAGCTCGTATGAATGAGGTGATCAGTTTGTGG
 AAGAACTGCTAGAGGCCACTGAACTGAAAGGAATAAAGCTTCGTGAAGCCAACCAGCAA
 CAGCAATTTAATCGCAATGTTGAGGATATTGAATTGTGGCTATATGAAGTAGAAGGTCAC
 TTGGCTTCGGATGATTACGGCAAAGATCTTACCAATGTGCAGAACCTCCAGAAGAAACAT
 GCCCTGTAGAGGCAGATGTGGCTGCTCACCAGGACCGAATTGATGGCATCACCATTGAG
 GCCCGCCAGTTCCAAGATGCTGGCCATTTGATGCAGAAAACATCAAGAAGAAACAGGAA
 GCCCTCGTGGCTCGCTATGAGGCACTCAAGGAGCCCATGGTTGCCCGAAGCAGAAGCTG
 GCCGATTTCTGCGGTTGCAGCAGCTCTCCGGGATGTTGAGGATGAGGAGACGTGGATT
 CGAGAGAAAGAGCCATTGCCGATCTACCAACAGAGGTAAAGATTTAATTGGGGTCCAG
 AATCTGCTAAAGAAACATCAAGCCTTACAAGCAGAAATTGCTGGACATGAACCACGCATC
 AAAGCAGTTACACAGAAGGGGAATGCCATGGTGGAGGAAGGCCATTTTGTGCAGAGGAT
 GTGAAGGCCAAGCTTCACGAGCTGAACCAAAAGTGGGAGGCACTGAAAGCCAAAGCTTCC
 CAGCGTCGGCAGGACCTGGAGGACTCTCTGCAGGCCCAGCAGTACTTTGCTGATGCTAAC
 GAGGCTGAATCCTGGATGCGGGAGAAGGAACCCATTGTGGGCAGCACTGACTATGGCAAG
 GACGAAGACTCTGCTGAGGCTCTACTGAAGAAACACGAAGCTTTGATGTCAGATCTCAGT
 GCCTCAGGCAGCAGCATCCAGGCTTTGCGAGAACAAGCAGCAGCTCTGCCGGCAACAAGTG
 GCCCCACGGATGATGAGACTGGGAAGGAGCTGGTCTTGCTCTACGACTATCAGGAG
 AAGAGTCCCCGAGAGGTACCATGAAGAAGGGAGATATCCTTACCTTACTCAACAGCACC
 AACAAAGATTGGTGGAAAGTGAAGTGAACGATCGTCAGGGTTTTGTGCCGGCTGCGTAC
 GTGAAGAAATTGGACCCCGCCAGTCAGCCTCCCGGGAGAATCTCCTGGAGGAGCAAGGC
 AGCATAGCACTGCGGCAGGAGCAGATTGACAATCAGACACGCATAACTAAGGAGGCCGGC
 AGTGTATCTCTGCGTATGAAGCAGGTGGAAGAATAATCATTCTGCTGGAACGGGT
 GAGAAGCGTAAAGGCATGTTGGAGAAGAGTTGCAAGAAGTTTATGTTGTTCCGTGAAGCG
 AATGAACACAGCAATGGATCAATGAGAAGGAAGCCGCTCTGACAAGTGAGGAGGTCCGA
 GCAGACTTGGAGCAGGTTGAGGTGCTCCAGAAGAAGTTTATGACTTCCAGAAGGACCTG
 AAGGCCAATGAGTCACGGTTGAAGGACATTAACAAGGTAGCTGAAGACCTGGAGTCTGAA
 GGTCTTATGGCAGAGGAGGTGCAGGCTGTGCAACAACAGGAAGTGTATGGCATGATGCC
 AGGGATGAAAAGTATTCCAAGACAGCCTCCCGTGGAAAGTCTGCTCGTCTGATGGTTAC
 ACCGTGGCCACCTTTAATTCATCAAGGAGCTGAATGAGCGCTGGCGGTCCCTACAGCAG
 CTGGCCGAGGAACGGAGCCAGCTCTTGGCAGCGCCCATGAAGTACAGAGGTTCCACAGA
 GATGCTGATGAAACCAAGAATGGATTGAAGAGAAGAATCAAGCTCTAACACAGACAAT
 TATGGACATGATCTCGCCAGTGTCCAGGCCCTGCAACGCAAGCATGAGGGCTTCGAGAGG
 GACCTTGGCGCTCTCGGTGACAAGGTAACCTCCCTTGGTGAACACAGCAGAGCGCCTGATC
 CAGTCCCATCCCGAGTCAGCAGAAGACCTGCAGGAAAAGTGCACAGAGTTAAACCAGGCC
 TGGAGCAGCTGGGAAACGTGCAGATCAGCGCAAGGCAAAGTTGGGTGACTCCCACGAC
 CTGCAGCGCTTCTTAGCGATTTCCGGGACCTCATGTCTTGGATCAATGGAATACGGGG
 TTGGTGTCTCAGATGAGCTAGCCAAGGATGTCACCGAGCTGAGGCATTGCTGGAGCGA
 CACCAGGAACACCGGACAGAAAATCGATGCCAGGGCTGGCACTTTCCAGGCATTTGAGCAG
 TTTGGACAGCAGCTGTTGGCTCACGGACACTATGCCAGCCCTGAGATCAAGCAGAAAATT
 GATATTCTTGACCAGGAGCGTGCAGACCTGGAGAAGGCCTGGGTTGAGCGCAGGATGATG
 CTGGATCAGTGCCTTGAAGTGCAGCTGTCCATCGGGACTGTGAGCAAGCTGAGAACTGG
 ATGGCTGCCCGGAGGCCTTCTTGAATACCGAAGACAAAGGAGACTCACTGGACAGCGTA
 GAGGCTCTGATCAAAAAACATGAAGACTTTGACAAAGCGATTAACGTCCAGGAAGAGAAG
 ATTGCTGCTCTGCAGGCCTTTGGCGACCAGCTCATCGCTGCCGGCCATTATGCCAAGGGA
 GACATTTCTAGCCGGCGCAATGAGGTCTTGACAGGTGGCGACGTCTGAAAGCCAGATG

ATTGAGAAAAGGTCAAAGCTAGGAGAATCTCAAACCTCCAACAGTTCAGCCGGGATGTG
 GATGAGATTGAGGCTTGGATCAGTGAAAAATTGCAAACAGCGAGTGATGAGTCGTACAAG
 GATCCCACCAACATCCAGAGCAAGCACCAGAAGCACCAGGCTTTTGAAGCAGAGCTGCAT
 GCCAACGCTGACCGGATCCGTGGGGTTATCGACATGGGCAACTCCCTCATTGAACGTGGA
 GCCTGTGCCGGCAGTGAGGATGCTGTCAAGGCCCGCTGGCTGCCTTAGCTGACCAAGTGG
 CAGTTCCTTGGTCAAAAAGTCAGCGGAAAAGAGCCAGAACTGAAAGAAGCCAACAAGCAG
 CAGAAGTTCAACACAGGGATCAAGGACTTTGACTTCTGGCTGTCTGAGGTGGAGGCCCTG
 CTGGCATCCGAAGATTATGGCAAAGACCTGGCTTCTGTGAACAACCTGCTGAAAAAGCAT
 CAACTGCTGGAAGCAGATATATCTGCCATGAGGATCGCCTGAAGGACCTGAACAGCCAG
 GCAGACAGCTGATGACCAGCAGTGCCTTCGACACCTCCCAAGTAAAGGACAAGAGGGAC
 ACCATCAACGGGCGCTTCCAGAAGATCAAGAGCATGGCGGCTCCCGGCGAGCCAAGCTG
 AATGAATCCCATCGCTGCACAGTTTCTCCGGGACATGGATGACGAGGAGTCTGGATC
 AAGGAGAAGAAGCTGCTGGTGGGCTCAGAGGACTACGGCCGGACCTAACTGGCGTGCAG
 AACCTGAGGAAGAAGCACAAGCGGCTGGAAGCAGAACTGGCTGCGCATGAGCCGGCTATT
 CAGGGTGTCTGGACACTGGCAAGAAGCTGTCCGATGACAACACCATCGGGAAAGAGGAG
 ATCCAGCAGCGGCTGGCCAGTTTGTGGAGCACTGGAAAGAGCTGAAGCAGCTGGCAGCT
 GCCCGGGTCAAGCGGCTGGAAGAGTCTTGAATATCAGCAGTTTGTAGCCAATGTGAA
 GAGGAAGAAGCTGGATCAATGAGAAAATGACCCTGGTGGCCAGCGAAGATTATGGCGAC
 ACTCTTGGCCCATCCAGGGCTTACTGAAGAAACATGAAGCTTTTGAAGCAGACTTCACC
 GTCCACAAGGATCGCGTGAATGATGTCTGCACCAATGGACAAGACCTCATTAAAGAAGAC
 AATCACCATGAGGAGAACATCTCTTCAAAGATGAAGGGCTGAACGGGAAAGTGTGAGC
 CTGGAGAAAAGCTGCAGCCAGAGAAAGGCGAAGCTGGATGAGAACTCGGCCTTCTTCAAG
 TTCAACTGGAAGCGGAGCTGGTGGAGTCTGGATCGGTGAAAAGGAGAAACAGCTTGAAG
 ACAGATGATTATGGCCGAGACCTGTCTTCTGTGACAGCGCTCCTACCAACAGGAAACT
 TTTGACGCTGGGCTGCAGGCCTTCCAGCAGGAAGGCATTGCCAATCACTGCCCTCAA
 GATCAGCTTCTCGCCGCAACACGTTCAAGTCCAAGGCCATCGAGGCCCGGCACGCCTCC
 CTCATGAAGAGGTGGAGCCAGCTTCTGGCCAACCTCAGCCGCCGCAAGAAGAAGCTTCTG
 GAGGCTCAGAGTCACTTCCGCAAGGTGGAGGACCTTCTCTGACCTTCGCCAAAAGGCT
 TCTGCCTTCAACAGCTGGTTTGAATGCAGAGGAGGACTTAACAGACCCCGTGCCTGC
 AACTCCTTGAAGAAAATCAAAGCTTTGCGCGAGGCCACGACGCCTTCCGCTCCTCCCTC
 AGCTCTGCCAGGCTGACTTCAACCAGCTGGCCGAGCTGGACCGCAGATCAAGAGCTTC
 CGCGTAGCTCCAACCCCTACACCTGGTTTACCATGGAGGCCCTGGAGGAGACCTGGAGG
 AACCTACAGAAAATCATCAAGGAGAGGGAGCTGGAGCTGCAGAAGGAACAGCGGGCGCAG
 GAGGAGAACGACAAGCTGCGCCAGGAGTTTGCAGCAGCAGCAACGCCTTCCACCAGTGG
 ATCCAAGAGACCAGGACATACCTCCTCGATGGGTCTGTATGGTGAAGAGTCCGGGACC
 CTCGAATCCCAGCTTGAAGCTACCAAACGCAAGCACCAGGAAATCCGAGCCATGAGAAGT
 CAGCTCAAAAAGATCGAGGACCTGGGGGCCCATGGAGGAGGCCCTCATCTGGACAAC
 AAGTACACGGAGCACAGCACCGTGGGCTCGCCAGCAGTGGGACCAGCTGGACCAGCTG
 GGCATGCGCATGCAGCACAACCTGGAGCAGCAGATCCAGGCCAGGAACACAACAGGTGTG
 ACTGAGGAGGCCCTCAAAGAATTCAGCATGATGTTTAAACACTTTGACAAGGACAAGTCT
 GGCAGGCTGAACCATCAGGAGTTCAAATCTTGCCTGCGCTCCCTGGGCTATGACCTGCC
 ATGGTGGAGGAAGGGAACTGACCCTGAGTTCGAGGCAATCCTGGACACGGTGGATCCG
 AACAGAGATGGCCATGTCTCCTTGAAGAATACATGGCTTTCATGATCAGCCGCGAAACT
 GAGAAGCTCAAGTCCAGCGAGGAGATTGAGAGCGCCTTCCGGGCCCTCAGCTCAGAGGGA
 AAGCCTTACGTGACCAAGGAGGAGCTTACCAGAACCTGACCCGGGAACAAGCCGACTAC
 TGGCTCTCCACATGAAGCCCTACGTGGACGGCAAGGGCCGCGAGCTCCCACCGCGTTC
 GACTACGTGGAGTTCACCCGCTCGCTTTTCGTGAAGTGA

Clone variation with respect to NM_003127.3
 3486 c=>t;5391 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003127 unedited
 GGGGGGNNNGGGGGGANNNNNTTNNNTTTTNNNNNGTTTTTCCCCCGCCCGTTGCCGCA
 TTGGGGCGGTAGGCGTGTACGGTGGGNAGTCTATAAAGCAGNACTCATTTAGGTGACACT
 ATAGAATAACAAGTACTTGTCTTTTTGCAGCGGCCGCGAATTCGGCACGAGGGTGAACG
 GTGTGGAGCGGAGGCCGCGGAGGCTCCTCGGTCTTCAGCACCCCTCGGCCGACGCACC
 CACGCCCTCACCCCCGAGAGCCGAAAATGGACCAAGTGGGGTCAAAGTGTGGAAAC
 AGCAGAGGACATCCAGGAGAGCGGCAGCAGGTCTAGACCGATACCACCGCTTCAAGGA
 ACTCTCAACCCTTAGGCGTCAGAAGCTGGAAGATTCTATCGATTCCAGTTCTTTCAAAG
 AGATGCTGAAGAGCTGGAGAAATGGATACAGGAAAAAATTTCAGATTGCATCTGATGAGAA
 TTATAAAGACCAACCAACTTGCAGGAAAGCTTCAAGCATCAAGCATTTGAAGCTGA
 AGTGCAGGCCAACTCAGGAGCCATTGTTAAGCTGGATGAAACTGGAAACCTGATGATCTC
 AGAAGGGCATTGTCATCTGAAACCATACGGACCCGTTTGTGGAGCTGCACCGCCAGTG
 GGAATTACTTTTGGAGAAGATGCGAGAAAAAGGAATCAAAGTCTGCAGGCCAGAAAGTT
 GGTGCAGTACTTACGAGAATGTGAGGACGTGATGGACTGGATCAATGACAAGGAAGCAAT
 TGTTACTTCTGAAGAGCTGGGCCAGGATCTGGAGCATGTAGAGGTTNTACAGAAGAAATT
 GAAGAGTTTCAACAGATATGGCTGCTCATGAAGAAAGAGTTATGAAGTGAACCAGTTTGC
 TGCCAAACTCATACAGGAGCAGCAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003127 unedited
 GACTCACGTTGAATAGACTCCACTAGGTANATCTTGATACCTTTTTCTTTTTTGGGGGA
 AGTTTCAGTTATTTGTCTTTTACAAGAACACAGATTTGGGGGAGGGTGGGAGAGAGAACA
 AGGGGAGGAGCCAGCTGCTTCGATTTTCTGAAGTCGGAATGAGGGCAGCTGCTTCAAGAC
 ACAGACTGGGTCCCCACAGTACATGATGATTGTGACTGGACCGGAAGCGGGTTAGTGA
 AGCACCATTTTCTCCTAAGTCTTATTCCAAGCTAAGCAGGCTTAAGGTTACAGTGGAAAG
 TGAGAGCACACAGAGGAGCGGACATGCAGCAAGCGACGCAGGGCAAGCAGCGAGGGGTG
 GGTGACCCAGGGAGTGGCTCAGTTCACGAAAAGCGAGCGGGTGAAGTCCACGTAGTCGAA
 CGCGGTGGGGAGCTCGCGGCCCTTGCCGTCCACGTAGGGCTTCATGTGGGAGACGCAGTA
 GTCGGCTGTTCGCGGTGAGGTTCTGGTGTAGAGCTCCTCCTTGGTACGTAAGGCTTTCC
 CTCTGAGCTGAGGGCCCGAAGGCGCTCTCAATCTCCTCGCTGGACTTGACGTTCTCAGT
 TTCGCGGTGATCATGAAAGCCATGTATTCTTGAAGGAGACATGGCCATCTCTGTTCCG
 ATCCACCGTGTCCAGGATTGCCTCGAACTCAGGGTCAGGTTCCCCTTCTCCACCATGGG
 CAGGTCATAGCCAGGGAGCGCANGCAAGATTTGAACTNCTGATGGTTCCAGCCTGCCAGA
 CTTGTCCTTGCAAAGTGTTTAAACATCATGCTGAATTTCTTGAGGGCCTCCTCAGTCAC
 ACCTGTTGTGTTCTGGCCTGGATCTGCTGCTTCAAGGTGTGCTGCATG

Restriction Sites:

NotI-NotI

ACCN:

NM_003127

Insert Size:

8100 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:

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_003127.1](#), [NP_003118.1](#)

RefSeq Size: 7787 bp

RefSeq ORF: 7419 bp

Locus ID: 6709

UniProt ID: [Q13813](#)

Cytogenetics: 9q34.11

Domains: SH3, spectrin, EFh

Protein Families: Druggable Genome

Protein Pathways: Tight junction

Gene Summary: Spectrins are a family of filamentous cytoskeletal proteins that function as essential scaffold proteins that stabilize the plasma membrane and organize intracellular organelles. Spectrins are composed of alpha and beta dimers that associate to form tetramers linked in a head-to-head arrangement. This gene encodes an alpha spectrin that is specifically expressed in nonerythrocytic cells. The encoded protein has been implicated in other cellular functions including DNA repair and cell cycle regulation. Mutations in this gene are the cause of early infantile epileptic encephalopathy-5. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2010]
Transcript Variant: This variant (2) lacks an in-frame exon in the coding region, compared to variant 1. The resulting isoform (2) is shorter than isoform 1.