

## Product datasheet for TP511532

### Ank2 (NM\_178655) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse ankyrin 2, brain (Ank2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211532 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MTEVLVSDDEEGDDTVTGDGGEYLRPEDLKELGDDSLPSSQFLDGMNYLRYSLLEGGRSDSLRSFSSDRSH  
 TLSHASYLRDSAMIDDTVVIPSHQVSALAKEAERNSYRLSWGTEENLDNVALSSSPIHSGFLVFSMVDARG  
 GAMRGCRRHNLRIIIPPRKCTAPTRVTCRLVKRHLRATMPPMVEGEGLASRLIEVGPSSGAQFLGPVIVEI  
 PHFAALRGKERELVLRSENGDSWKEHFCDYTEDELNEILNGMDEVLDSPEDLEKRICRIITRDFPQYF  
 AVVSRIKQDSNLIGPEGGLSSTVVSQVQAVFPEGALTKRIRVGLQAQPMHSELVKKILGNKATFSPIVT  
 LEPRRRKFHKPITMTIPVPKASSDVMLNGFGGDAPTLRLLCSITGGTTPAQWEDITGTTPLTFVNECVSF  
 TTNVSARFWLIDCRQIQESVAFASQVYREIICVPYMAKFVFAKSHDPIEARLRCFCMTDDDKVDTLEQQ  
 ENFSEVARSRDVEVLEGGKPIYVDCFGNLVPLTKSGQHIFSFFAFKENRPLFVKVRDTTQEPGRLSFM  
 KEPKSTRGLVHQAICNLNITLPIYAKESESDQEPEEEIGMTSEKNPQDEQERMEERLAYIADHLGFSWTE  
 LARELDFTEEQIHQIRIENPNSLQDQSHALLKYWLERDGGKHATDTILIECLTKINRMDIVHLLLETNTEPL  
 QERMGRSYAEIEQTITLDHSEGFVLPDELCAAKEKKEQEASKESESSDHPMPMVEEDISVGYSTFDCL  
 PKTEGDSAAAALSPQMHQEPVQQDFSGKTQDQEQEYVTTPGAIVEDPQKATAVPDSLCKTPEDISTPPEG  
 TKPCLQTPVTSERGSPVQPEEASEPKEESSPRKTSLVIVESTDDQSQVFERLDGDAAFQKGGDDMPDIP  
 PETVTEEEYVDENGHTVKKVTRKIIRRYVSSDGTKEEVTMQGMPQEPVNIEDGDNYSKVIKRVWLKSD  
 TQQSEVTLSEPSVLSSTSQFQAEPVEGRRVSKVVKTTMVHGERMEKSLGDDSSLATDLPSAKDDFEEDNNE

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	117.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C after receiving vials.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_848770</a>
<b>Locus ID:</b>	109676
<b>UniProt ID:</b>	<a href="#">Q8C8R3</a>
<b>RefSeq Size:</b>	5790
<b>Cytogenetics:</b>	3 56.07 cM
<b>RefSeq ORF:</b>	3153
<b>Synonyms:</b>	100043364; AI835472; Ank-2; AW491075; Gm4392
<b>Summary:</b>	<p>Plays an essential role in the localization and membrane stabilization of ion transporters and ion channels in several cell types, including cardiomyocytes, as well as in striated muscle cells. In skeletal muscle, required for proper localization of DMD and DCTN4 and for the formation and/or stability of a special subset of microtubules associated with costameres and neuromuscular junctions (PubMed:19109891). In cardiomyocytes, required for coordinate assembly of Na/Ca exchanger, SLC8A1/NCX1, Na/K ATPases ATP1A1 and ATP1A2 and inositol 1,4,5-trisphosphate (InsP3) receptors at sarcoplasmic reticulum/sarcolemma sites (PubMed:12571597). Required for expression and targeting of SPTBN1 in neonatal cardiomyocytes and for the regulation of neonatal cardiomyocyte contraction rate (PubMed:15262991). In the inner segment of rod photoreceptors, required for the coordinated expression of the Na/K ATPase, Na/Ca exchanger and beta-2-spectrin (SPTBN1) (PubMed:19007774). Plays a role in endocytosis and intracellular protein transport. Associates with phosphatidylinositol 3-phosphate (PI3P)-positive organelles and binds dynactin to promote long-range motility of cells. Recruits RABGAP1L to (PI3P)-positive early endosomes, where RABGAP1L inactivates RAB22A, and promotes polarized trafficking to the leading edge of the migrating cells. Part of the ANK2/RABGAP1L complex which is required for the polarized recycling of fibronectin receptor ITGA5 ITGB1 to the plasma membrane that enables continuous directional cell migration (PubMed:27718357).[UniProtKB/Swiss-Prot Function]</p>