

Product datasheet for MR231871

Ank1 (NM_001277280) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ank1 (NM_001277280) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ank1
Synonyms: Ank-1; nb; pale
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR231871 representing NM_001277280
Red=Cloning site Blue=ORF Green=Tags(s)

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GCCGCGATCGCC

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CAGGAAGGGGGCTCAGATAGTGAAGCGGGCCAGCCTGAAAAGGGGCAAGCAG

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231871 representing NM_001277280
Red=Cloning site Green=Tags(s)

MAQAAKQLKKIKDIEAQUALQEKEKEESNRKRRNRSRDRKKKADAATSFLRAARSGNLDKALDHLRNGVD
INTCNQNLNGLHLASKEGHVMMVVELLHKEIILETTTCKGNTALHIAALAGQDEVVREL VNYGANVNAQ
SQKGFTPLYMAAQENHLEVVKFLLENGANQNVATEDGFTPLAVALQQGHENVAHLINYGTKGKVRPAL
HIAARNDTRTAAVLLQNDPNPDVLSKTGFTPLHIAAHYENLNVAQLLLNRGASVNFTPQNGITPLHIAS
RRGNVIMVRLLLDRGAQIETRDKDEL TPLHCAARNGHVR ISEILLDHGAPIQAKTKNGLSPIHMAAQGDH
LDCVRLLLQYNAEIDDI TLDHL TPLHVAHCHGHRVAKVLLDKGAKPNSRALNGFTPLHIACKKNHIRVM
ELLLKTGASIDAVTESGLTPLHVASFMGHLP IVKNLLQRGASPNVSNVKVETPLHMAARAGHTEVAKYLL
QNKAKANAKAKDDQTP LHCAARIGTGMVKLLLENGASPNLATTAGHTPLHTAAREGHVDTALALLEKEA
SQACMTKKGFTPLHVAKYGKVR LAELLEHDAHNAAGKNGL TPLHVAVHNNLDIVKLLPRGGSPHS
PAWNGYTPLHIAAKQNI EVARSL LQYGGSANAESVQGV TPLHLAAQEGHTEMVALLSKQANGNLGNKS
GLTPLHLVSQEGHVPADVLIKHGVTVDATTRMGYTP LHVASHYGNIKL VKFLLQHQADVNAKTKLGYSP
LHQAAQQGHTDIVTLLKNGASPNVSSNGTTP LAIAKRLGYISVTDV LKVVTDETSVVL VSDKHRMSYP
ETVDEILDVSEDEGDEL VGSKAERRDSRDV GEEKELLD FVPKLDQVVE SPAIPRIPCVTPE TVVIRSEDQ
EQASKEYDEDSLIPSSPATETSDNISPVASPVHTGFLVSFMDARGGSMRGRHNGLRVVIPPRCAAPT
RITCRLVKPQKLNTPPLAE EELASRIIALGPTGAQFLSPVIVEIPHFA SHGRGDREL VVLRSENGSVW
KEHKSRYGESYLDQILNGMDEELGSLEELEKRVCR IITTD FPLYFVIMSRLCQDYDTIGPEGGSLRSLK
VPLVQATFPENAVTKVKLALQAQVPDELVT KLLGNQATFSPIVTV EPRRRKFRHP IGLRIPLPPSWTD
NPRDSGEGD TTSRLRLCSVIGGTDQAQWEDITGTTKLIYANECANFTTNVSARFWLSDCPRTA EAVHFAT
LLYKELTAVPYMAKFVIFAKMNDAREGLRCYCM TDDKVDK TLEQHENFVEVARSDIEVLEGMPLFAEL
SGNLVPVKKAAQQR SFHFQSFRENRLAIPVKVRDSSREP GGFLSFLRKTMYEDTQHILCHLNITMPPCT
KGSGAEDRRRTL TPLTLRYSILSE SRLGFTSDTDRVEMRMAVIREHLGLSWAELARELQF SVEDINRIRV
ENPNLLDQSTALLTLWVDREGENAKMENLYTALRNIDRSEIVNMLEGGSRQSRNLKPERRHGDREYSLS
PSQVNGQQRVHARITDSPSVRQVLD RSQARTLDWDKQGSTAVHPQEATQSSWQEEVTQGPHSFQRRIITTI
QGPEPGALQEYEQVLVSTREHVQRGPPETGSPKAGKEPSLWAPESAFSQEVQGDDELQNIPEQVTEEQFT
DEQGNIVTKKIIRKVVQRVDSSGAIDTQQHEEVELRGSGLQPD LIEGRKGAQIVKRASLKRKQ

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

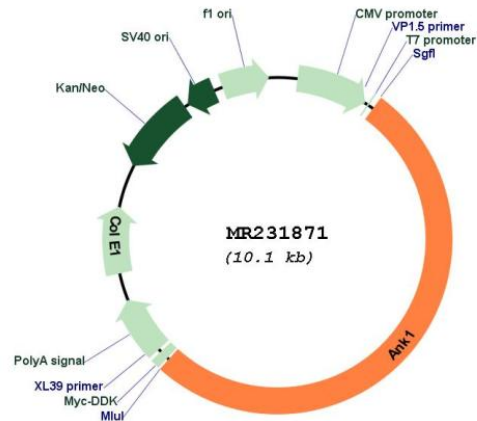
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001277280

ORF Size: 5232 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_001277280.2](#), [NP_001264209.1](#)

RefSeq Size: 7794 bp

RefSeq ORF: 5235 bp

Locus ID: 11733

UniProt ID: [Q02357](#)

Cytogenetics: 8 11.42 cM

MW: 192.5 kDa

Gene Summary: Attaches integral membrane proteins to cytoskeletal elements; binds to the erythrocyte membrane protein band 4.2, to Na-K ATPase, to the lymphocyte membrane protein GP85, and to the cytoskeletal proteins fodrin, tubulin, vimentin and desmin. Erythrocyte ankyrins also link spectrin (beta chain) to the cytoplasmic domain of the erythrocytes anion exchange protein; they retain most or all of these binding functions. In skeletal muscle, isoform Mu7 together with obscurin may provide a molecular link between the sarcoplasmic reticulum and myofibrils.[UniProtKB/Swiss-Prot Function]