

Product datasheet for RC220637

ANK1 (NM_020475) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ANK1 (NM_020475) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ANK1
Synonyms:	ANK; SPH1; SPH2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC220637 representing NM_020475 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC220637 representing NM_020475
 Red=Cloning site Green=Tags(s)

MPYSVGFREDAATSFLRAARSGNLDKALDHLRNGVDINTCNQNLNGLHLASKEGHVMMVVELLHKEII
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 TEDGFTPLAVALQQGHENYVAHLINYGTKGVRLPALHIAARNDDTRTAAVLLQNDPNPDVLSKTGFPL
 HIAAHYENLVAQLLLNRGASVNF TPQNGITPLHIASRRGNVIMVRLLLDRGAQIETKTKDEL TPLHCAA
 RNGTHVRISEILLDHGAPIQAKTKNGLSPIHMAAQGDHLDVRLLLQYDAEIDDITLDHL TPLHVAACHGH
 HRVAKVLLDKGAKPNSRALNGFTPLHIACKKNHVRMELLLKTGASIDAVTESGL TPLHVASFMGHLPIV
 KNLLQRGASPNVSNVKVETPLHMAARAGHTEVAKYLLQNKAKVNAKAKDDQTPLHCAARIGHTNMVKLL
 ENNANPNLATTAGHTPLHIAAREGHVETV LALLEKEASQACMTKKGF TPLHVAAYGKVRVAELLERDA
 HPNAAAGNGL TPLHVAVHHNLDIVKLLPRGGSPHSPAWNGYTPLHIAAKQNQVEVARSLQYGGSSANA
 ESVQGVTPHLAAQEGHAEMVALLSKQANGNLGNKSGL TPLHLVAQEGHVPADVLIKHGVMVDATTRM
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 LAIAKRLGYISVTDVVKVVTDETSFVLVSDKHRMSFPETVDEILDVSEDEGEELISFKAERRDSRDVDEE
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 TGAQFLSPVIVEIPHFASHGRGDREL VVLRSENGSVWKEHRSRYGESYLDQILNGMDEELGSLLEELEKCR
 VCRIITDFPL YFVIMSRLCQDYDTIGPEGGSLKSKL VPLVQATFPENAVTKRVKALQAQVPDELVTK
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 EQAEMKMAVISEHLGLSWAELARELQF SVEDINRIRVENPNSLLEQSVALLNLWVIREGQANMENLYTA
 LQSIDRGEIVNMLEGSGRQSRNLK PDRRHTDRDYSLSPSQMNGYSSLQDELLSPASLGCALSSPLRADQY
 WNEVAVLDAIPLAATEHDTMLEMSDMQVWSAGL TPSLVTAEDSSLECSKAEDSDATGHEWKLEGALSEEP
 RGPPELGSLELVEDD TVSDATNGLIDLLEQEEGQRSEEKLP GSKRQDDATGAGQDSENEVSLVSGHQRGQ
 ARITHSPTVSQVTERSQDRLQDWDADGSI VSYLQDAAQGSWQEEVTQGPFSFGTSTMTEGLEPGGSQEY
 EKVLVSVSEHTWTEQPEAESQADRDRRQQGQEEQVQEAKNFTTQVVQGNFQNIIPGEQVTEEQFTDEQG
 NIVTKKIIRKVVVRQIDLSSADAAQEHEEDHTSTPNP

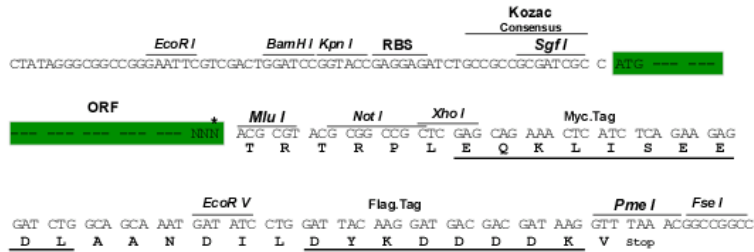
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

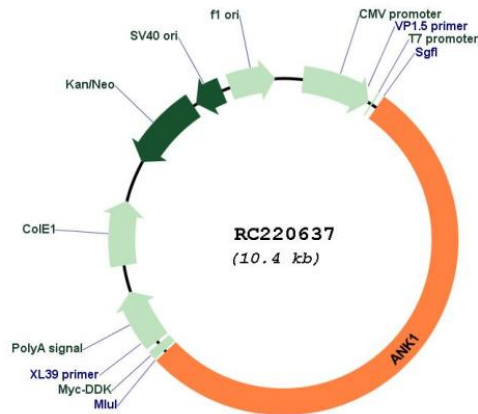
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_020475

ORF Size: 5568 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:	<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_020475.3
RefSeq Size:	8165 bp
RefSeq ORF:	5571 bp
Locus ID:	286
UniProt ID:	P16157
Cytogenetics:	8p11.21
Protein Families:	Transmembrane
MW:	203.2 kDa
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]