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Product datasheet for RC226435

Ankyrin brain (ANK2) (NM_001127493) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ankyrin brain (ANK2) (NM_001127493) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ANK2
Synonyms:	ANK-2; brank-2; CFAP87; FAP87; LQT4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

ORF Nucleotide Sequence:

>RC226435 representing NM_001127493
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC226435 representing NM_001127493
Red=Cloning site Green=Tags(s)

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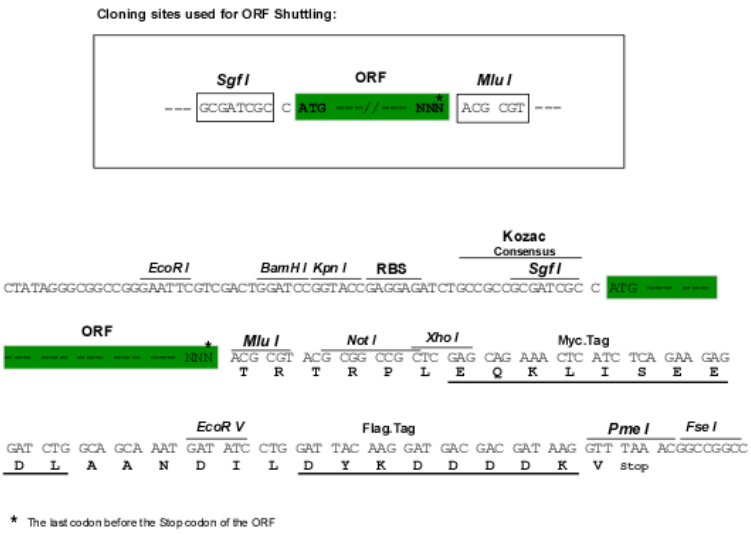
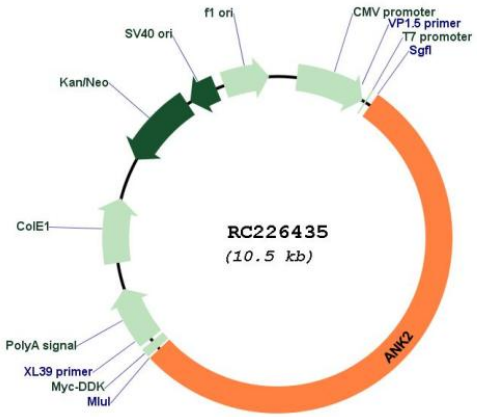
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001127493

ORF Size: 5589 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_001127493.2
RefSeq Size:	8082 bp
RefSeq ORF:	5592 bp
Locus ID:	287
UniProt ID:	Q01484
Cytogenetics:	4q25-q26
Protein Families:	Druggable Genome
MW:	204.8 kDa
Gene Summary:	This gene encodes a member of the ankyrin family of proteins that link the integral membrane proteins to the underlying spectrin-actin cytoskeleton. Ankyrins play key roles in activities such as cell motility, activation, proliferation, contact and the maintenance of specialized membrane domains. 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. The protein encoded by this gene is required for targeting and stability of Na/Ca exchanger 1 in cardiomyocytes. Mutations in this gene cause long QT syndrome 4 and cardiac arrhythmia syndrome. Multiple transcript variants encoding different isoforms have been described. [provided by RefSeq, Dec 2011]