

## Product datasheet for RC212082

### Ankyrin G (ANK3) (NM\_001149) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ankyrin G (ANK3) (NM_001149) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ankyrin G
Synonyms:	ANKYRIN-G; MRT37
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212082 representing NM_001149 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTTTACCGCAGAGTGAAGATGCAATGACCGGGACACAGACAAATATCTTGGGCCACAGGACCTTA  
AGGAATTTGGGTGATGATTCCTGCCTGCAGAGGGTTACATGGGCTTTAGTCTCGGAGCGGTTCTGCCAG  
CCTCCGCTCCTCAGTTCGGATAGGTCTTACACCTTGAACAGAAGCTCCTATGCACGGGACAGCATGATG  
ATTGAAGAAGTCTTGTGCCATCCAAGAGCAGCATCTAACATTCACAAGGAATTTGATTCAGATTCTC  
TTAGACATTACAGCTGGGCTGCAGACACCTTAGACAATGTCAATCTTGTTCAGCCCATTCATTCTGG  
GTTTCTGTTAGCTTTATGGTGGACGCGAGAGGGGCTCCATGAGAGGAAGCCGTCATCACGGGATGAGA  
ATCATCATTCTCCACGCAAGTGTACGGCCCCACTCGAATCACCTGCCGTTTGGTAAAGAGACATAAAAC  
TGGCAACCCACCCCATGGTGAAGGAGAGGGATTAGCCAGTAGGCTGGTAGAAATGGGTCTGCAGG  
GGCACAATTTTTAGGCCCTGTCAAGTGGAAATCCCTCACTTTGGGTCCATGAGAGGAAAAGAGAGAGAA  
CTCATTGTTCTTGAAGTGAAGTGGTGAAGTGGTGAAGTGGTGAAGTGGTGAAGTGGTGAAGTGGTGAAG  
TAACCGAGTACTTAATGGCATGGATGAAGAAGTGGTGAAGTGGTGAAGTGGTGAAGTGGTGAAGTGGTGAAG  
CAGGATTATCACGAAAGATTTCCCCAGTATTTGCAGTGGTTCCTCCGGATTAAGCAGGAAAGCAACCCAG  
ATTGGTCTGAAGTGGAAATCTGAGCAGCACCACAGTCCCTTGTTCAGCATCTTTCCAGAGGGGTG  
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TGAAAAACAAAGCAACTTTTAGCCCAATTGTCACTGTGGAACCAAGAACGGAATTTCCATAAAACCAATC  
ACAATGACCATTCCGGTCCCGCCCTCAGGAGAAGGTGTATCCAATGGATACAAAGGGGACACTACAC  
CCAATCTGCGTCTTCTGTAGCATTACAGGGGCACTTCGCTGCTCAGTGGGAAGACATCACAGGAAC  
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GACTGCCATCAAGTTTTAGAAACTGTGGGTTAGCCACGCAACTGTACAGAGAATTGATATGTGTTCCAT  
ATATGGCCAAGTTTGTGTTTTGCCCCAAATGAATGATCCCGTAGAATCTTCTTGGCATGTTTCTGCAT  
GACAGATGACAAAGTGGACAAAACCTTTAGAGCAACAAGAGAATTTTGGGAAGTCCGAAGAAGCAAGAT



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ATTGAGGTTCTGGAAGGAAAACCTATTTATGTTGATTGTTATGGAAATTTGGCCCCACTTACCAAAGGAG  
 GACAGCAACTGTTTTAACTTTTATTCTTTCAAAGAAAATAGACTGCCATTTTCCATCAAGATTAGAGA  
 CACCAGCCAAGAGCCCTGTGGTCGTCTGTCTTTCTGAAAGAACCAAGACAACAAAAGGACTGCCTCAA  
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 CCAGCAAGCTTATAATAGAAGAGACTAAACCCTGTGTGCCTGTGAGTATGAAAAAGATGAGTAGGACTTC  
 TCCAGCAGATGGCAAGCAAGGCTTAGCCTCCATGAAGAAGAGGGGTCCAGTGGGCTGAGCAAAAGCAG  
 GGAGAAGTTTAAGGTGAAAACGAAGAAGAAATCCGGCATGTGAAAAGAAGGCCACTCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAGGTTTAA

**Protein Sequence:**

>RC212082 representing NM\_001149  
 Red=Cloning site Green=Tags(s)

MALPQSEDAMTGDTKYLGPQDLKELGDDSLPAEGYMGFSLGARSASLRSFSSDRSYTLNRSSYARDSMM  
 IEELLVPSKEQHLTFTRFDSDSL RHYSWAADTLDNVNLVSSPIHSGFLVSMVDARGGSMRGRSHHGMR  
 IIPPRKCTAPTRITCRLVKRHLKLANPPMVEGELASRLVEMGPAGAQLGPVIVEIPHFGSMRGKERE  
 LIVLRSENGETWKEHQFDSKNEDELTELLNGMDEELDSPEELGKKRICRIITKDFPQYFVVSRIKQESNQ  
 IGPEGGILSSTTVPLVQASFPEGALTKRIRVGLQAQVPVDEIVKKILGNKATFSPIVTVEPRRRKFHKPI  
 TMTIPVPPPSGEGVSNYKGDTPNLRLLCSITGGTSPAQWEDITGTTPLTFIKDCVSFTTNVSARFWLA  
 DCHQVLETVGLATQLYRELICVPYMAKVVFAKMNDPVESSLRCFCMTDDKVDKLEQQENFEVARSKD  
 IEVLEGPPIYVDCYGNLAPLTKGGQQLVFNFYFKNRPLPFSIKIRDTSQEPCGRLSFLKEPKTKGLPQ  
 TAVCNLNIITLPAHKKIEKTD RRQSFASLALRKRYSYL TEPGMSPQSPCERTDIRMAIVADHLGLSWTELA  
 RELNFSVDEINQIRVENPNLSISQSFMLLKKWTRDGKNATTDALTSVLTKINRIDIVTLLEGPIFDYGN  
 ISGTRSFADENNVFHPVDGYPQLVELETPGLHYTPPTPFQDDYFSDISSIESPLRTPSRLSDGLVP  
 SQGNIHSADGPPVVAEDASLEDSKLEDSVPLTEMPEAVDVEDSQLENVCLSWQNETSSGNLESCAQR  
 RVTGGLLDRLDDSPDQCRDSITSYLKGEAGKFEANGSHEITPEAKTKSYFPESQNDVKGQSTKETLKP  
 IHGSGHVEEPASPLAAYQKSLEETS KLIEETKPCVPVSMKKMSRTSPADGKPRLSLHEEEGSSGSEQKQ  
 GEGFKVTKKEIRHVEKSHS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja3340\\_h01.zip](https://cdn.origene.com/chromatograms/ja3340_h01.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001149

**ORF Size:** 3003 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\\_001149.3](#), [NP\\_001140.2](#)

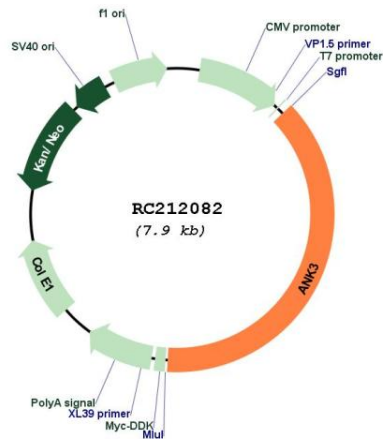
**RefSeq Size:** 7218 bp

**RefSeq ORF:** 3006 bp

**Locus ID:** 288  
**UniProt ID:** [Q12955](#)  
**Cytogenetics:** 10q21.2  
**Domains:** ZU5, ANK  
**Protein Families:** Druggable Genome  
**MW:** 111.1 kDa

**Gene Summary:** Ankyrins are a family of proteins that are believed to 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 3 is an immunologically distinct gene product from ankyrins 1 and 2, and was originally found at the axonal initial segment and nodes of Ranvier of neurons in the central and peripheral nervous systems. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Feb 2011]

### Product images:



Circular map for RC212082