

## Product datasheet for **MR215584**

### Ank3 (NM\_170730) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ank3 (NM_170730) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ank3
Synonyms:	2900054D09Rik; AI314020; An; Ank; Ank-3; AnkG; Anky; Ankyrin-3; Ankyrin-G
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>MR215584 representing NM\_170730  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGAGTGAAGAGCCAAAGGAGAAGCCGCCAAGCCTGCTCATAGGAAGAGGAAAGGAAAAAGCACCTGA  
CGTTCACGAGGGAGTTTGATTCTGACTCCCTCAGACACTACAGTTGGGCAGCGGACACGTTAGATAATGT  
GAACCTGGTCTCAAGCCCGGTGCATTCTGGGTTTCTGGTTAGCTTTATGGTGGACGCGAGAGGGGCTCC  
ATGCGAGGAAGCCGCCACCACGGGATGCGGATCATCATCCCTCCGCGAAAGTGTACGGCCCCACCCGCA  
TCACGTGCCGCTGGTAAAGAGACATAAACTGGCCAACCCACCCCATGGTGGAAAGGAGAGGGATTAGC  
CAGTAGGCTGGTAGAAATGGTCTCGGGGGCACAATTTTAGGCCCGTCATTGTGAAATCCCTCAT  
TTTGGTCCATGAGGGGAAGGAGAGAGAACTTATCGTCTTCGGAGCGAGAACGGAGAGACCTGGAAGG  
AACATCAGTTTGACAGTAAAAACGAAGACCTCGCGGAGCTTCTCAATGGCATGGATGAAGAACTCGACAG  
CCCGGAAGAGTTGGGTACAAAGCGCATCTGCAGAATTATCACAAAGGATTTCCCCAGTATTTGCCGTG  
GTTCCCGGATTAAAGCAGGAAAGCAACCAGATCGGTCTGAGGGTGGGATTCTGAGCAGCACCACCGTGC  
CCCTCGTCCAGGCCTCCTTCCCAGAGGGCGCCTTAACCAAGAGGATCCGTGTGGGTCTCCAGGCTCAGCC  
CGTGCCAGAGGAAACGGTAAAAAATCCTTGGGAACAAAGCAACATTTAGCCCAATTGTACGGTAGAG  
CCGAGGAGAAGGAAGTTCATAAGCCGATCACCATGACCATTCCGGTGCCCCCGCCTCGGGAGAAGGCG  
TGTCCAATGGGTACAAGGGGATGCCACGCCAACCTGCGGCTCCTCTGCAGCATCACAGGAGGCACCTC  
ACCAGCTCAATGGGAAGACATCACAGGAACAACCCCTCTGACGTTTATAAAGGATTGTGTCTTTTACA  
ACCAACGTTTACGCCAGATTCTGGCTGGCGGACTGCCATCAGGTGTTAGAGACCGTAGGGCTAGCCTCCC  
AGCTGTACAGAGAGCTGATATCGTTCCTACATGGCCAAGTTCGTTGTGTTTCCAAAAACAAAGACCC  
GGTGGATCCTCGCTGAGGTGCTTCTGTATGACAGACGACAGGGTGGACAAAACCTGGAGCAGCAGGAG  
AACTTCGAGGAGGTTGCCAGAAGCAAAGACATTGAGGTTCTGGAAGGAAAGCCCTCTACGTTGATTGCT  
ATGAAACCTGGCCCTCTGACCAAGGAGGACAGCAGCTTGTGTTTAACTTTTATTCTTTCAAAGAAAA  
CAGACTGCCATTTTCCATCAAGATCAGAGACACCAGTCAAGAGCCCTGTGGCCGCTGTCTTTCTGAAG  
GAGCCAAAGACAACAAAGGGATTACCCCAACAGCTGTTTGAACCTTAAATTAATCTGCGCCGACATA  
AAAAGGCTGAGAAGGCAGACAGACGCCAGAGCTTTCCTCCCTAGCTTACGTAAGCGCTACAGCTACTT  
GACTGAACCCAGCATGAGTCCGAGAGTCTTGTGAGCGGACGGATATCAGGATGGCGATAGTAGCCGAT  
CACCTGGGACTTAGTTGGACAGAGCTGGCAAGGGAAGTGAATTTTTCAGTGGATGAAATCAACCAATAC  
GTGTGGAAAATCCCAATTTTAAATTTCTCAGAGCTTCATGTTATTAAGGAGTGGGTGACCAGAGACGG  
AAGAATGCCACAACATGATGCCTTAACTTCGGTCTTAACGAAGATTAACCGGATAGACATTGTAACCTCTG  
CTGGAAGGACCAATTTGATTATGGGAATATTTAGGCACCAGAAGCTTTGCAGATGAAAAAATGTTT  
TCCATGACCCAGTTGATGGTTGGCAGAACGAGACGCCAAGTGGAAAGCCTAGAGTCCCCAGCGCAAGCTCG  
AAGACTAACTGGTGGTTACTGGACCGTCTGGATGACAGCTCTGACCAGGCTCGGGATTCTATTACCTCA  
TACCTCACGGGAGAACCTGGGAAGATCGAAGCAAATGGAAACACACAGCGGAAGTCATTCCAGAAGCAA  
AGGCAAAACCTACTTCCCGAATCCAAAACGATATAGGGAACAGAGCATCAAGGAGAACCTGAAACC  
AAAAACACACGGATGTGGTGCAGTGGGAACCAAGTGTGCGCCCTCACAGCCTACCAGAAATCTCTGGAA  
GAAACCAGCAAGCTTGTATAGAAGACGCACCTAAACCTGTGTGCTGTGCGCATGAAAAAGATGACCA  
GGACTACGGTGCAGGCAAGCCAGGCTCAACCTCCAGGAAGAAGAGGGTCCACCAGGTGAGGCTTAA  
GCAGGGAGAAGGCTATAAGGTGAAGACGAAGAAGGAAATCCGGAACGTGGAGAAGAAAACCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR215584 representing NM\_170730  
Red=Cloning site Green=Tags(s)

MSEEPKEKPAKPAHRKRKGGKHLTFTREFDSDSLRHYSWAADTLDNVNLVSSPVHSGFLVSFMDARGGS  
MRGSRHHGMRIIIPPRKCTAPTRITCRLVKRHLANPPPMVEGGLASRLVEMGPAGAQLGPVIVEIPH  
FGSMRGKERELIVLRSENGETWKEHQFDSKNEDLAELNGMDEELDSPEELGTRICRIITKDFPQYFAV  
VSRIKQESNQIGPEGGILSSTTVPLVQASFPEGALTKRIRVGLQAQPVPEETVKKILGNKATFSPIVTVE  
PRRRKFHKPITMTIPVPPPSGEGVSNKYGDATPNLRLLCSITGGTSPAQWEDITGTTPLTFIKDCVSFT  
TNVSARFWLADCHQVLETVGLASQLYRELICVPYMAKFVVFVAKTNDPVESSLRCFCMTDDRRVDTLEQQE  
NFEEVARSKDIEVLEGPYVDCYGNLAPLTKGGQQLVFNFYFENRPFSEIKIRDTSQEPCGRLSFLK  
EPKTTKGLPQTAVCNLNLPAHKKAEKADRRQSFASLALRKRYSTEPSMSPQSPCERTDIRMAIVAD  
HLGLSWTELARELNFSVDEINQIRVENPNLSISQSFMLLKKWVTRDGKNATTDALTSVLTKINRIDIVTL  
LEGPIFDYGNISGTRSFADENNVFHDVPDVGWQNETPSGSLESPAQARRLTGGLLDRLDSSDQARDSITS  
YLTGEPGKIEANGNHTAEVIPEAKAPYFPESQNDIGKQSIKENLKPETHGCGRTEEPVSPLTAYQKSL  
ETSKLVIEDAPKPCVPVGMKKMTRTTADGKARLNLQEEEGSTRSEPKQGEQYKVKTKKEIRNVEKKT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

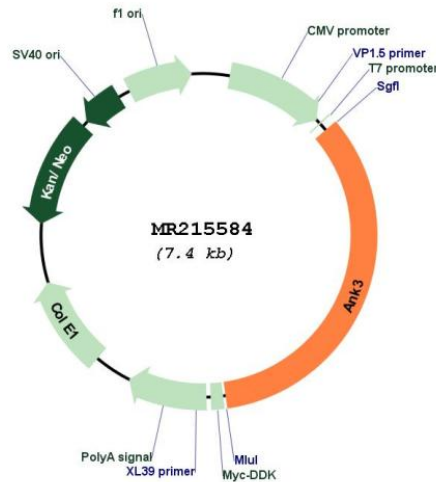
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_170730

ORF Size: 2514 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\\_170730.2](#), [NP\\_733926.2](#)

RefSeq Size: 6656 bp

RefSeq ORF: 2517 bp

Locus ID: 11735

UniProt ID: [G5E8K5](#)

**Cytogenetics:** 10 36.1 cM

**MW:** 93.8 kDa

**Gene Summary:** This gene encodes a member of the ankyrin protein family. Ankyrins link integral membrane proteins to the spectrin-based cytoskeleton. Ankyrin family members share a protein structure which includes three independently folded domains: the N-terminal ankyrin repeat domain, the central spectrin-binding domain, and the C-terminal rod domain. This ankyrin functions as the major ankyrin in the kidney and may play a role in the polarized distribution of many integral membrane proteins to specific subcellular sites. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]