

## Product datasheet for **MG215345**

### Ank3 (NM\_170729) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ank3 (NM_170729) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ank3
Synonyms:	2900054D09Rik; AI314020; An; Ank; Ank-3; AnkG; Anky; Ankyrin-3; Ankyrin-G
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG215345 representing NM_170729 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGTGAAGAGCCAAAGGAGAAGCCCGCCAAGCCTGCTCATAGGAAGAGGAAAGGAAAAAGTCTGATG  
CCAACGCAAGTTACTTAAGAGCAGCTCGGGCAGGGCACCTGGAAAAGGCCCTTGACTACATCAAAAATGG  
AGTGGACGTCAACATCTGTAACCAAGATGGATTGAATGCACTCCATCTTGCTTCAAAGAAGGCCATGTG  
GAAGTGGTCTCTGAGCTGCTGCAGAGGGAAGCCAATGTTGATGCCGCCACAAAGAAAGGAAACACGGCCT  
TACACATCGCATCTTTGGCTGGCAAGCGGAAGTGGTCAAGGTCTTGTTACGAACGGAGCGAATGTCAA  
CGCACAATCTCAGAATGGCTTACACCATTGTATATGGCAGCCCAGGAGAACCACCTGGAAGTCGTCAAG  
TTTCTTCTGGACAATGGCGCCAGCCAAAGCCTGGCCACAGAGGACGGCTTACGCCATTGGCCGTGGCTC  
TGCAACAAGGTCAATGACCAAGTCGTGTCCCTCCTGCTCGAGAACGACACGAAGGGAAAAAGTGCAGCTCCC  
AGCCCTCCACATCGCAGCCCGGAAAGACGACACCAAGGCAGCAGCTCTGCTCCTGCAGAAATGACACAAA  
GCGGACGTGGAGTCAAAGAGTGGCTTACCCCGCTCCACATAGCTGCCACTATGGGAACATCAATGTGG  
CCACGTTGCTGTTAAACCGAGCGGCTGCTGTGGACTTACCCGACGGAATGACATCACTCCCTTACACGT  
TGCTCGAAGCGAGGAAATGCAAAATATGGTGAAGCTATTGCTGGACCGGGGTGCGAAGATCGATGCCAAG  
ACCAGGACGGTCTGACTCCGTTGCACTGTGGGGCGAGAAGTGGCCATGAGCAGTGGTAGAGATGTTGC  
TTGACAGATCCGCCCCATCCTTTCAAAAACCAAGAATGGATTGTCGCCACTGCACATGGCCACACAAGG  
AGACCATTTAAACTGCGTCCAACCTCCTCCAGCACAACGTGCCCGTGGACGACGTCAACCAACGACTAC  
CTGACTGCCCTCCATGTGGCTGCCACTGCGGCCATTACAAAAGTGC AAGGTTCTTTGGATAAGAAAAG  
CTAGCCCCAATGCCAAAGCCCTGAATGGCTTACCCCTCTCCATATCGCCTGCAAAAAGAACCAGCATCCG  
AGTAATGGAACCTCTTTGAAGCACGGTGCATCTATTCAAGCCGTAACCGAGTCGGGCCCTACCCCAATC  
CATGTTGCTGCCTTCATGGGACATGTAATATCGTGTACAGCTAATGCATCATGGAGCCTCCCAAAACA  
CCACCAATGTGAGAGGAGAGACGGCATTGCATATGGCGGCTCGGTCCGGACAAGCAGAAGTGGTGGGTA  
TCTGGTCCAAGATGGGGCTCAGGTAGAAGCAAAAGCTAAGGATGACCAGACTCCACTCCACATCTCAGCC



[View online »](#)

CGACTTGGGAAAGCTGACATAGTGCAACAACCTGTTACAGCAAGGAGCATCCCCAATGCAGCAACAACCT  
 CTGGGTACACCCCTTCACCTTGC GGCCAGAGAGGGGCATGAGGATGTAGCTGCGTTCTCTGGATCA  
 TGGAGCATCTTTATCCATAACAACAAAGAAGGGATTACCCCTCTGCACGTGGCAGCCAAATACGGAAAG  
 CTTGAAGTCGCAAGTCTCCTGCTGCAGAAGAGTGCCTCTCCCGATGCCGAGGGAAGAGCGGGCTAACTC  
 CACTGCATGTAGCAGCGCATTACGATAATCAGAAAAGTGGCCCTTCTGCTCTTGGACCAGGGAGCCTCACC  
 CCACGCAGCCGCAAGAATGGCTATACACCACTGCACATCGCGGCCAAGAAGAACCAGATGGACATAGCC  
 ACGTCCCTGCTGGAGTACGGTGTGATGCAAAACGCGGTTACCCGGCAAGGGATTGCGTCCGTCCATCTTG  
 CGGCACAGGAAGGCACGTGGACATGGTGTGCTGCTCCTGAGTAGAAAACGCGAATGTCAACCTGAGCAA  
 TAAGAGCGGTCTCACCCACTCCACCTGGCTGCTCAAGAAGACCGAGTGAATGTGCCGAGGTCTTGTGTC  
 AACCCAGGGGGCCCATGTGGATGCTCAGACAAAGATGGGCTACACCCCGCTCCATGTGGGCTGCTACTATG  
 GAAATATCAAAATAGTCAATTTTCTGCTGCAGCATTCTGCAAAAGTTAATGCCAAGACGAAGAATGGATA  
 CACAGCACTGCACCAGGCTGCTCAGCAGGGCCACACGCATATCATCAATGTCTTGGCTTCAAGAACCGCC  
 TCCCCAATGAACCTACTGTGAATGGGAACACAGCTCTGGCCATCGCCCGCGCCTTGGTTACATCTCGG  
 TGGTTGACACACTGAAGTCTGACGGAGGAAATATGACCACCACTACCATCACGGAGAAGCACAAAAT  
 GAATGTCCGAAACGATGAATGAAGTCTCGATATGTCAGACGATGAAGTGAAGATGCCATCACAGGG  
 GACACTGACAAGTATCTCGGGCCACAGGACCTTAAAGAGCTAGGTGATGACTCCCTGCCAGCAGAAGGTT  
 ACGTAGGCTTCACTCTTGGAGCCGTTCTGCCAGCCTCCGCTCCTCAGTTCGGATAGGTCTACACCTT  
 GAACAGAAGCTCCTACGCAAGGGACAGCATGATGATAGAGGAACTTCTGGTACCATCAAAGAGCAGCAC  
 CTGACGTTACAGAGGGAGTTTATTCTGACTCCCTCAGACACTACAGTTGGGCAGCGGACACGTTAGATA  
 ATGTGAACCTGGTCTCAAGCCCGGTGCATTCTGGGTTTCTGGTTAGCTTTATGGTGGACGCGAGAGGGGG  
 CTCCATGCGAGGAAGCCGCCACCACGGGATGCGGATCATCATCCCTCCGCGAAAGTGTACGGCCCCACC  
 CGCATACGTCGCCCTGGTAAAGAGACATAAACTGGCCAACCCACCCCATGGTGAAGGAGAGGGAT  
 TAGCCAGTAGGCTGGTAGAAATGGTCTTGCAGGGGACAAATTTTAGGCCCGCTATTGTGAAATCCC  
 TCATTTTGGGTCCATGAGGGGGAAGGAGAGAGAAGTATCGTCTTTCGGAGCGAGAACGGAGAGACCTGG  
 AAGGAACATCAGTTTACAGTAAAAACGAAGACCTCGCGGAGCTTCTCAATGGCATGGATGAAGAATCG  
 ACAGCCCGGAAGAGTTGGGTACAAAGCGCATCTGCAGAATTATCACAAGGATTTCCCCAGTATTTTGC  
 CGTGGTTTCCCGATTAAAGCAGGAAAGCAACCAGATCGGTCTGAGGGTGGGATTCTGAGCAGCACCACC  
 GTGCCCTCGTCCAGGCCTCCTTCCAGAGGGCGCCTTAAACCAAGAGGATCCGTGTGGGTCTCCAGGCTC  
 AGCCCGTCCAGAGGAACGGTAAAAAAATCCTTGGGAACAAAGCAACATTTAGCCCAATTGTCACGGT  
 AGAGCCGAGGAGAAGGAAGTTCCATAAAGCCGATCACCATGACCATTCCGGTGCACCCCGCCTCGGGAGAA  
 GCGGTGTCCAATGGGTACAAGGGGGATGCCACGCCAACCTGCGGCTCCTCTGCAGCATCACAGGAGGCA  
 CCTCACCAGCTCAATGGGAAGACATCACAGGAACAACCCCTCTGACGTTTATAAAGGATTGTGTGCTTT  
 CACAACCAACGTTTCAGCCAGATTCTGGCTGGCGGACTGCCATCAGGTGTTAGAGACCGTAGGGCTAGCC  
 TCCCAGCTGTACAGAGAGCTGATATGCGTTCCTACATGGCCAAGTTCGTTGTGTTTGCACAAAACAAACG  
 ACCCGGTGGAGTCTCGCTGAGGTGCTTCTGTATGACAGACGACAGGGTGGACAAAACCTGGAGCAGCA  
 GGAGAACTTCGAGGAGTTGCCAGAAGCAAGACATTGAGGTTCTGGAAGGAAAGCCCATCTACGTTGAT  
 TGCTATGGAAACCTGGCCCTCTGACCAAAGGAGGACAGCAGCTTGTTTTTAACTTTTATTCTTTCAAAG  
 AAAACAGACTGCCATTTCCATCAAGATCAGAGACACCAGTCAAGAGCCCTGTGGCCGCTGCTTTCT  
 GAAGGAGCCAAAGACAACAAAGGGATTACCCCAACAGCTGTTTGCAACTTAAATATTACTTGCCGGCA  
 CATAAAAAGGCTGAGAAGGCAGACAGACGCCAGAGCTTTGCCCTCCTAGCTTTACGTAAGCGCTACAGCT  
 ACTTGACTGAACCCAGCATGAGTCCGCAGAGTCTTGTGAGCGGACGGATACAGGATGGCGATAGTAGC  
 CGATCACCTGGGACTTAGTTGGACAGAGCTGGCAAGGGAAGTGAATTTTTAGTGGATGAAATCAACCAA  
 ATACGTGTGAAAATCCCAATCTTTAATTTCTCAGAGCTTATGTTATTAAGAAAGTGGGTGACCAGAG  
 ACGGAAAGAAATGCCACAACCTGATGCCTAACTTCGGTCTTAACGAAGATTAACCGGATAGACATTGTAAC  
 TCTGCTGGAAGGACCAATATTTGATTATGGGAATTTTCAGGCACCAGAAGCTTTGCAGATGAAAACAAAT  
 GTTTTCCATGACCCAGTTGATGGTACCCTTCTTCAAGTGGAGCTGGAGACCCCATGGGGTTGACT  
 GCACACCACCAACCTTTCCAGCAAGATGACCATTTTAGTGATATCTTAGCATAGAGTCTCCCTTAG  
 GACCCCAAGTAGACTGAGTGACGGGCTGGTGCCTTCCAGGGAAACATAGAGCATCCAACAGGTGGACCT  
 CCAAGTGGTAACCCGAGAGGACACTTCTTGAAGACAGCAAAATGGACGATTCTGTAACGTAAACAGACC  
 CGGCCGACCCACTGGACGTAGATGAGAGCCAGTTGAAGGACCTGTGTGAGAGCGAGTGTGCTCAGTGCTG  
 GGCGAGTGTGCCCGGATCCCAACGACGGTCCGAGGACAGCCACTGAGACCCGAGACTAGAAAAGTA  
 GGCATGAGCTCTGAACAGCAGGAAAAAGGAAAATCTGGTCTGATGAGGAAGTACAGAAGACAAGGTCA

AATCTCTGTTTGAGGACATTCACCTTGAAGAAGTAGAGGCTGAGGAGATGACAGAAGACCAGGGGCAGGC  
TATGCTTAACCGTGTTACAGCGAGCAGAAGCTGGCAATGTCTTCACTTGCAGGTTGGCAGAACGAGACGCCA  
AGTGGAAGCCTAGAGTCCCAGCGCAAGCTCGAAGACTAACTGGTGGGTTACTGGACCGTCTGGATGACA  
GCTCTGACCAGGCTCGGGATTCTATTACCTCATACCTCACGGGAGAACCTGGGAAGATCGAAGCAAAATGG  
AAACCACACAGCGGAAGTCATCCAGAAGCAAAGGCAAAACCTACTTCCCGAATCCCAAAACGATATA  
GGGAAACAGAGCATCAAGGAGAAGCTGAAACCAAAACACACGGATGTGGTGCACACTGAGGAACCACTAAAC  
CGCCCTCACAGCCTACCAGAAATCTCTGGAAGAAACAGCAAGCTTGTGCATAGAAGACGCACCTAAAC  
CTGTGTGCCTGTGCGCATGAAAAAGATGACCAGGACTACGGCTGACGGCAAAGCCAGGCTAACCTCCAG  
GAAGAAGAGGGTCCACCAGGTCAGAGCCTAAGCAGGGAGAAGGCTATAAGGTGAAGACGAAGAAGGAAA  
TCCGGAACGTGGAGAAGAAAACCCAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG215345 representing NM\_170729  
Red=Cloning site Green=Tags(s)

MSEEPKEKPAKPAHRKRKGGKSDANASYLRAARAGHLEKALDYIKNGVDVNICNQNLNALHLASKEGHV  
EYVSELLQREANVDAATKKGNTALHIASLAGQAEVVKVLVTNGANVNAQSQNGFTPLYMAAQENHLEVVR  
FLLDNGASQSLATEDGFTPLAVALQQGHDQVVSLLLLENDTKGKVRPALHIAARKDDTKAAALLQNDTN  
ADVESKSGFTPLHIAAHYGNINVALLLNRAAAVDFTARNDITPLHVASKRGNANMVKLLDRGAKIDAK  
TRDGLTPLHCGARSGHEQVVEMLLDRSAPILSKTKNGLSPLHMATQGDHLNCVQLLLQHNVVDDVTNDY  
LTALHVAACHGHYKVAKVLLDKKASPNKALNGFTPLHIAACKNIRVMELLLKHGASIQAVTESGLTPI  
HVAAFMGHVNIQSVMHGHGASPNTTNRGETALHMAARSQAQEVVRYLVQDGAQVEAKAKDDQTPHLHISA  
RLGKADIVQQLLQQGASPNAAATTSYTPHLHAAAREGHEDVAAFLLDHGASLSITTKKGFPLHVAAYGK  
LEVASLLLQKSASPDAAAGKSGLTPLHVAHYDNQKVALLLDQGASPHAAAKNGYTPLHIAAKKNQMDIA  
TSLLEYGADANAVTRQGIASVHLAAQEGHVDMSVLLSRNANVNLNKSGLTPLHLLAAQEDRVNVAEVLV  
NQGAVDAQTKMGYTPLVHGCHYGNIKIVNLLQHSKVNKTKNGYALHQAQQGHITHIINVLLQNNNA  
SPNELTVNGNTALAIARRLGYISVVDTLKVVTEEIMTTTTITEKHKMNVPETMNEVLDMSDDEGEDAITG  
DTDKYLGPQDLKELGDDSLPAEGYVGFSLGARSASLRSFSSDRSYTLNRSSYARDSMMIEELLVPSKEQH  
LFTTREFDSDSLRHYSWAADTLDNVNLVSSPVHSGFLVFMVDARGGSMRGRHGMRIIIPPRKCTAPT  
RITCRLVKRHLANPPPMVEGELASRLVEMGPAGAQLGPIVIVEIPHFGSMRGKERELIVLRSENGETW  
KEHQFDSKNEDLAELLNGMDEELDSPEELGTRICRIITKDFPQYFAVVSRIKQESNQIGPEGGILSSTT  
VPLVQASFPEGALTKRIRVGLQAQPVPEETVKKILGNKATFSPIVTVPEPRRRKFHKPITMTIPVPPPSGE  
GVSNGYKGDATPNLRLCSITGGTSPAQWEDITGTTPLTFIKDCVSFTTNVSARFWLADCHQVLETVGLA  
SQLYRELICVPYMAKFVVFAKTNDPVESLRCFCMTDDRVDKTLQENFEVARSKDIEVLEGKPIYVD  
CYGNLAPLTKGGQQLVFNFYFSENRLPFSIKIRDTSQEPGRLSFLKEPKTTKGLPQTAVCNLNLTLPA  
HKKAEKADRRQSFASLALRKRYSYLTPSMSQPSPCERTDIRMAIVADHLGLSWTELARELNFVDEINQ  
IRVENPNLSISQFMLLKKWVTRDGKNATTDALTSVLTINRIDIVTLLGPIFDYGNISGTRSFADENN  
VFHDPVDGHPFSQVELETPMGLYCTPPNPFQDDHFSDISSIESPFRTPSRLSDGLVPSQGNIEHPTGGP  
PVVTAEDTSLEDSKMDDSVTVTDPADPLDVESQLKDLQSECAQCWASVPGIPNDGRQAEPLRPQTRKV  
GMSSEQQEKGKSGPDEEVTEDEKVKSLFEDIQLEEEVEAEEMTEDQGQAMLNRVQRAELAMSSLAGWQNETP  
SGSLESPAQARRLTGGLDRLDDSSDQARDSITSYLTGEPGKIEANGNHTAEVIPEAKAKPYFPESQNDI  
GKQSIKENLKPETHGCGRTEEPVSPLTAYQKSLEETSCLVIEDAPKPCVPVGMKKMTRTTADGKARLNLQ  
EEEGSTRSEPKQGEYKVKTKKEIRNVEKKT

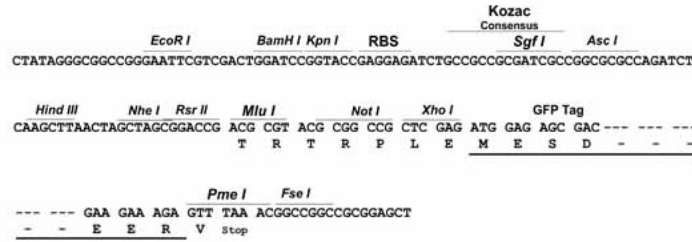
TRTRPLE – GFP Tag – V

**Restriction Sites:**

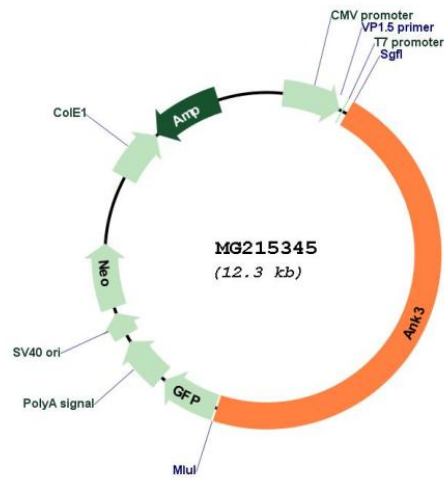
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_170729

ORF Size: 5766 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_170729.2</a> , <a href="#">NP_733925.2</a>
<b>RefSeq Size:</b>	9908 bp
<b>RefSeq ORF:</b>	5769 bp
<b>Locus ID:</b>	11735
<b>UniProt ID:</b>	<a href="#">G5E8K5</a>
<b>Cytogenetics:</b>	10 36.1 cM
<b>Gene Summary:</b>	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]