

Product datasheet for MC223395

Tnk2 (NM_016788) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tnk2 (NM_016788) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tnk2
Synonyms:	Ack; Ack-1; Ack1; Cdgip; Pyk1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223395 representing NM_016788 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGCAGCCGGAGGAGGGAACGGGCTGGCTGTTGGAGCTGCTGTCCGAGGTGCAGCTACAACAGTATTTCC
TGAGGCTTCGAGATGACCTCAACATTACCCGCCTATCTCATTTTGAATATGTCAAAAATGAAGACCTGGA
AAAGATTGGCATGGGCCGGCCTGGCCAGAGGCGGCTGTGGAGGCCGTGAAGAGGAGGAAGGCCATGTGC
AAACGCAAGTCATGGATGAGCAAGGTGTTCAAGTGGAAAGCGGTTGGAGGCCGAGTTCCTTCCCAGCACT
CTCAGAGCACCTTCCGGAAGCCCTCCCCACCCAGGGAGCCTGCCAGGGGAGGGGACCCCTGCAGAGCCT
CACCTGCCTCATTGGGGAGAAAGACCTACGCCTGCTGGAGAAGCTGGGGGATGGCTCCTTTGGCGTGGTG
CGCAGGGGTGAATGGGACGCCCCCGCAGGGAAGACGGTGAGTGTGGCCGTCAAGTGCCTGAAGCCTGACG
TGCTGAGCCAGCCAGAGGCCATGGACGACTTCATCCGGGAGGTCAATGCCATGCATTACTAGACCACCG
AAACCTCATTTCGCTTGTATGGTGTGGTGTCTCACACTACCCATGAAGATGGTGACAGAGCTGGCACCTCTG
GGATCTTTGTTGGACCGCCTACGTAACACCAAGGTCAATTCCTCTTGGGGACGCTGAGTCGCTACGCTG
TGCAGGTGGCTGAGGGTATGGCCTACCTGGAGTCCAAGCGCTTCATTACCGGGATCTGGCTGCTCGAA
CCTGCTTTTGGCTACCCGGACCTGGTCAAGATTGGGGACTTCGACTGATGCGAGCTCTGCCCCAGAAT
GATGACCACTATGTCATGCAAGAACCACGCAAGGTGCCCTTTGCCTGGTGTGCCCTGAGAGCCTGAAGA
CACGGACTTTCTCCCATGCCAGTGACACCTGGATGTTTGGGGTACACTGTGGGAGATGTTACATATGG
CCAGGAGCCCTGGATTGGCCTCAATGGCAGCCAGATCTGCATAAGATCGACAAGGAAGGGGAGCGCCTG
CCCCGGCCGGAGGACTGCCCTCAAGACATCTACAATGTCATGGTCCAGTGTGGGCCACAAGCCAGAGG
ACAGACCACATTTGTGGCTCTTCGGGACTTCTGCTGGAGGCTCAGCCCACTGACATGCGGGCTCTTCA
GGACTTTGAGGAGCCAGATAAACTGCACATCCAGATGAATGACGTCATCACTGTCATCGAGGGAAGGGCT
GAGAACTACTGGTGGCGTGGCAGAATACGCGGACCCTGTGTGTAGGACCCTTCCCTCGAAATGTCGTGA
CCTCCGTGGCTGGCCTGTGAGCCAGGACATCAGCCAGCCTCTACAGAATAGCTTCATTACACAGGACA
TGGTGACAGTGACCCCGCCACTGCTGGGGTTCCTGACAGGATCGATGAACTGTACCTGGGAAACCCC
ATGGACCCTCCTGACCTGCTGAGTGTGGAAGTACGACCTCCCGACCCAGCACCTAGGACGGGTGA



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AAAGGGAGCCTCCACCTCGCCACCTCAGCCTGCCATCTTCACTCAGAAGCCAACATACGACCCTGTGAG
 TGAGGACCCAGACCCCTGTCCAGCGACTTCAAGAGGCTTGGCCTGAGGAAGCCAGCCCTGCCTCGAGGG
 CTGTGGCTGGCAAAGCCCTCAGCCCAGTGCCAGGCACCAAGGCAGCCGAGCAGTGGGGGTGAGGTCA
 CACTCATCGACTTCGGTGAGGAGCCTGTGGTCCCAACCCTCGGCCCTGTGCACCCTCCTTGGCAGATT
 GGCCATGGATGCCTGCTCCTTGTGGACAAGACACCACCACAGAGCCCCACACGGGCACTGCCACGACCT
 TTACACCCACCCCTGTGGTAGACTGGGACGCGCGTCCGCTGCCCCGCCCTGCCTATGACGACGTGG
 CCCAGGATGAGGATGACTTTGAGGTCTGCTCCATCAACAGCAGCCTAGTAGGTGCAGGCCCTCCCTGCTGG
 GCCTAGCCAAGGCGAGACCAATTACGCCTTTGTACCTGAGCAGGCGCAGATGCCCTGCCTGGAGGAT
 AACCTGTTCTTCCACCCAGGGCGGAGGCAAGCCGCCAGCTCAGTGCAGACTGCAGAGATTTTCCAGG
 CACTGCAGCAGGAGTGTATGCGGCAGCTACAGGTCCCCACTGGCCAGCTGACCCCTCCCCGACCCAGG
 AGGTGATGACAAGCCCAAGTGCACCCCGGTACCTATTCCTCGGCCACGCGTCCACGTGTGGAG
 CTATCTCCAGCTCCCTCGGGTGAAGAGACAAGCCGGTGGCCTGGACTGCCTCGCCCCCGAGTGC
 CTCCCCGGGAACCTCTGTCTCCTCAAGTTCAAGGACCCCAAGCCCTAGTGCCACCTGGCAGCTCTCC
 ACTACCGCATCGGCTCTTAGCTCACCTGGAAAGACCATGCCACCCTCAAAGCTTTGCCTCAGACCCT
 AAGTATGCCACTCCACAAGTATCCAGGCTCCTGGCCACGGGAGGCCCTGCATCCTGCCATTGTGCC
 GCGATGGCAGGAAGGTACGACGACTCATTACTACCTGCTGCCTGAGCGCCCTCCTACCTGGAACGCTA
 TCAGCGCTTCTCGGGAGGCCAGAGCCCGGAAGAGCCGGCCCTGCCTGTGCCCGCTGTGGCC
 CCGCCAGTACTCCAGCCCTGTGCCCCACTGCCACCGTACAGCTATGCCTCAGGCCGCCAGACC
 CAAAGGCCAATTCTCCACCAATAACAGCAACCCAGGGGACGGCCACCATCCCTGAGGGCCACGGCTCG
 GCTGCCACAGAGGGGTGCCAGGGGACGGCAAGAGGCTGCTCGGCCAGCAGACAAGGTCCAGATGCTG
 CAGGCCATGGTGCATGGGGTACCACAGAGGAGTGCCAGGCGGCCCTGCAGAGCCACAGTGGAGTGTTC
 AGAGGGCTGCCAGTATCTGAAGGTGGAGCAGCTTTTGGGCTGGTCTTCGGCCACGGGTGGAGTGCCA
 CAAGGTCTAGAGATGTTGACTGGAACCTAGAGCAAGCCGGCTGCACCTTCTGGGCTCCTGTGCCCT
 GCTCATCACAACGC

AGCGGACCGACGCTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-RsrII

ACCN:

NM_016788

Insert Size:

3168 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_016788.3](#), [NP_058068.2](#)

RefSeq Size:

4454 bp

RefSeq ORF: 3168 bp

Locus ID: 51789

UniProt ID: [O54967](#)

Cytogenetics: 16 B3

Gene Summary: Non-receptor tyrosine-protein and serine/threonine-protein kinase that is implicated in cell spreading and migration, cell survival, cell growth and proliferation. Transduces extracellular signals to cytosolic and nuclear effectors. Phosphorylates AKT1, AR, MCF2, WASL and WWOX. Implicated in trafficking and clathrin-mediated endocytosis through binding to epidermal growth factor receptor (EGFR) and clathrin. Binds to both poly- and mono-ubiquitin and regulates ligand-induced degradation of EGFR, thereby contributing to the accumulation of EGFR at the limiting membrane of early endosomes. Downstream effector of CDC42 which mediates CDC42-dependent cell migration via phosphorylation of BCAR1. May be involved both in adult synaptic function and plasticity and in brain development. Activates AKT1 by phosphorylating it on 'Tyr-176'. Phosphorylates AR on 'Tyr-267' and 'Tyr-363' thereby promoting its recruitment to androgen-responsive enhancers (AREs). Phosphorylates WWOX on 'Tyr-287'. Phosphorylates MCF2, thereby enhancing its activity as a guanine nucleotide exchange factor (GEF) toward Rho family proteins. Contributes to the control of AXL receptor levels. Confers metastatic properties on cancer cells and promotes tumor growth by negatively regulating tumor suppressor such as WWOX and positively regulating pro-survival factors such as AKT1 and AR.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.