

## Product datasheet for **RG215366**

### ACK1 (TNK2) (NM\_001010938) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ACK1 (TNK2) (NM\_001010938) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** TNK2  
**Synonyms:** ACK; ACK-1; ACK1; p21cdc42Hs  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG215366 representing NM\_001010938  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTCGAGGCCCGCCCGCCAGGACGCAGGGCAGTGACGCTGCCGGTGCCGCTGCGGGGCGGGGGCTGC  
 GGGCGTGTCTCTCCCTGACCGCAGCCGCTGGGATTTGGGGCTCCATGGGGGAGAGATCTGCTTACCA  
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 GCGACACCTGGATGTTCCGGGTGACACTGTGGGAAATGTTACCTACGGCCAGGAGCCCTGGATCGGCT  
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CAGAACACACGGACGCTGTGTGTGGGGCCCTCCCTCGCAACGTGGTGACCTCCGTGGCCGGCCTGTCCG  
 CCCAGGACATCAGCCAGCCCCTGCAAGACAGCTTCATCCACACAGGGCATGGCGACAGTACCCCCGCCA  
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 TGGCGATGGGCCAGAGCGGGCCGGCCAGCAGACAAGATCCAGATGGTGGAGCAGCTCTTGGGGTGGGT  
 CTGCGGCCAGAGGGGAGTGCCACAAAGTGTGGAGATGTTGACTGGAACCTGGAGCAGCCGGCTGCC  
 ACCTTCTGGGCTCCTGGGCCCTGCCACCACAAGCGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG215366 representing NM\_001010938

Red=Cloning site Green=Tags(s)

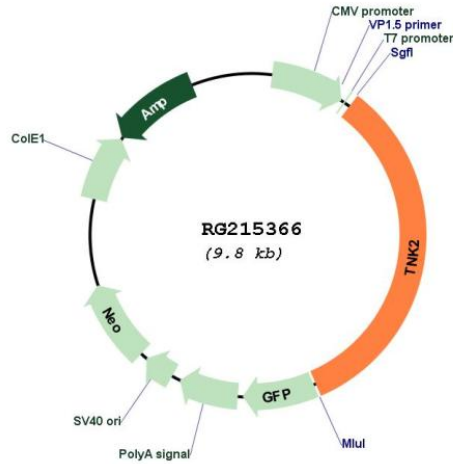
MLEARPPRTQGSDAAGAAAGRGLRALLLSLTAAAGIWGSMGERSAYQRLAGGEEGPQRLGGGRMQPEEGT  
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 KVFSGKRLAEFPPHHSQSTFRKTSPAPGGPAGEGLQSLTCLIGEKDLRLEKLDGGSFVVRRGEWDA  
 PSGKTVSVAVKCLKPDVLSQPEAMDDFIREVNAMHSLDHRNLIRLYGVVLTTPMKMVTTELAPLSLLDRL  
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 QDIYNVMVQCWAHKPEDRPTFVALRDFLLEAQPTDMRALQDFEEDKLHIQMNVDITVIEGRAENYWRG  
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 DWDARPLPPPPAYDDVAQDEDDFEICSNSTLVGAGVPAGSPSQGTNYAFVPEQARPPPLEDNLFPPQ  
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 AAPATATVRPMPQAALDPKANFSTNNSNPARGPPPRATARLPQRGCPGDGPEAGRPAKDIQMVEQLFGLG  
 LRPRGECHKVLEMFWDNLEQAGCHLLGSWGAHHR

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001010938

**ORF Size:** 3258 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.

<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>	<u><a href="#">NM_001010938.1</a></u> , <u><a href="#">NP_001010938.1</a></u>
<b>RefSeq Size:</b>	4222 bp
<b>RefSeq ORF:</b>	3144 bp
<b>Locus ID:</b>	10188
<b>UniProt ID:</b>	<u><a href="#">Q07912</a></u>
<b>Cytogenetics:</b>	3q29
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Gene Summary:</b>	This gene encodes a tyrosine kinase that binds Cdc42Hs in its GTP-bound form and inhibits both the intrinsic and GTPase-activating protein (GAP)-stimulated GTPase activity of Cdc42Hs. This binding is mediated by a unique sequence of 47 amino acids C-terminal to an SH3 domain. The protein may be involved in a regulatory mechanism that sustains the GTP-bound active form of Cdc42Hs and which is directly linked to a tyrosine phosphorylation signal transduction pathway. Several alternatively spliced transcript variants have been identified from this gene, but the full-length nature of only two transcript variants has been determined. [provided by RefSeq, Jul 2008]