

Product datasheet for **SC323475**

ACK1 (TNK2) (NM_005781) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACK1 (TNK2) (NM_005781) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACK1
Synonyms:	ACK; ACK-1; ACK1; p21cdc42Hs
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_005781, the custom clone sequence may differ by one or more nucleotides

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ATGCAGCCAGAGGAGGGCACAGGCTGGCTGCTGGAGCTGCTGTCGAGGTGCAGCTGCAACAGTACTTCC
TGGCGCTCCGAGATGACCTCAACGTCAACCCGCTGTCCACTTTGAGTACGTCAAGAATGAGGACCTGGA
GAAGATCGGCATGGGTGCGCCTGGCCAGCGGGCGCTGTGGGAGGCTGTGAAGAGGAGGAAGGCCTTGTGC
AAACGCAAGTCGTGGATGAGTAAGGTGTTCAAGTGAAAGCGACTGGAGGCTGAGTTCCACCTCATCACT
CTCAGAGCACCTTCCGGAAGACCTCGCCCGCCCTGGGGGCCAGCAGGGGAGGGGCCCTCGAGAGCCT
CACCTGCCTCATTGGGAGAAGGACCTGCGCCTCCTGGAGAAGCTGGGTGATGGTTCCTTTGGCGTGGT
CGCAGGGGCGAGTGGGACGCGCCCTCAGGGAAGACGGTGAAGTGTGGCTGTGAAGTGCCTGAAGCCCGATG
TCCTGAGCCAGCCAGAAGCCATGGACGACTTCATCCGGGAGGTCAATGCCATGCACTCGCTCGACCACCG
AAACCTCATCCGCTCTACGGGGTGGTGTCTCACGCCCCATGAAGATGGTGACAGAGCTGGCACCTCTG
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TGCAGGTGGCTGAGGGCATGGGCTACCTGGAGTCCAAGCGCTTTATTACCGTGACTGGCTGCCGCCAA
TCTGCTGTTGGCTACCCGCGACCTGGTCAAGATCGGGGACTTTGGGCTGATGCGAGCACTACCTCAGAAT
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CACGCACCTTCTCCCATGCCAGCGACACCTGGATGTTCCGGGTGACACTGTGGGAAATGTTACCTACGG
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ACAGACCCACGTTTGGGCCCTGCGGGACTTCTGCTGGAGGCCAGCCACAGACATGCGGGCCCTTCA
GGACTTTGAGGAACCGGACAAGCTGCACATCCAGATGAATGATGTCATCACCGTCATCGAGGGAAGGGCC
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AGCCGAGGCGAGGGGCTGAGGTACGCTCATCGACTTCGGTGAAGAGCCCGTGGTCCCGGCCCTACGGC
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CCCCCGCCCGCTATGACGACGTGGCCAGGATGAGGATGACTTTGAGATCTGCTCCATCAACAGCACCC
TCGTGGGCGCGGGGGTCCCTGCCGGGCCAGCCAGGGCCAGACCAACTACGCCTTTGTGCCTGAGCAGGC
GCGGCCGCCCCCTCCCCTGGAGGACAACCTGTTCTCCCGCCCCAGGGTGGGGGCAAGCCGCCAGCTCC
GCACAGACCGCAGAGATCTCCAGGCGCTACAGCAGGAGTGATGAGGCAACTGCAGGCTCCGGCCGGCT
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GGACTGTCTCCCTCCCGGGTGCCTCCGCGGGAGCCCTGTCCCTCAAGGCTCGAGGACACCCAGCC
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CACCCAGAGCTTTGCCTCAGACCCAAAGTACGCCACCCCCAGGTATCCAGGCCCTGGCCCGCGGGCT
GGTCCCTGCATCCTGCCATCGTCCGGATGGCAAGAAGGTGACGAGCACCCTATTACTTGTGCCCG
AGCGACCATCCTACCTGGAGCGTACCAGCGTTCCTGCGTGAGGCCAGAGCCCGAGGAGCCTACCCC
CCTGCCTGTGCCTCTGCTGCTGCCCCACCCAGCACCCAGCCCCGCGCCCCACGGCCACCGTGC
CCGATGCCCGAGGCTGCCTTGGACCCCAAGGCCAATTCTCCACCAACAACAGCAACCCAGGGGCCCGG
CACCACCCCGAGGGCACTGCTCGGCTGCCACAGAGGGGCTGCCCTGGCGATGGCCAGAGGCGGGCCG
GCCAGCAGACAAGATCCAGATGGCCATGGTGCATGGGGTGACCACAGAGGAGTGCAGGCGGCCCTGCAG
TGCCACGCTGGAGCGTGCAGAGGGCTGCCAGTATCTGAAGGTGGAGCAGCTTTCGGGCTGGGTCTGC
GGCCAGAGGGGAGTGCCACAAAGTGTGGAGATGTTGACTGGAACCTGGAGCAGGCCGGCTGCCACCT
TCTGGGCTCCTGGGGCCCTGCCACCACAAGCGCTGA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_005781 unedited ACCGCCGTTGAGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCATTTAGGTG ACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGGCCGGAATCCCGGGATCGCGGAGCCGGCTG AGCGCAGGGCCGAGCTGCGGGGCAGAGGCTGGGAGGCGGCAGAATGCAGCCAGAGGAGGGCACAGGCTGG CTGCTGGAGCTGCTGTCCGAGGTGCAGTGAACAGTACTTCTGCGGCTCCGAGACGACCTCAACGTCA CCCGCTGTCCCACCTTTGAGTACGTCAAGAATGAGGACCTGGAGAAGATCGGCATGGGTGCGCCTGCCAG CGCGCTGTGGGAGCTGTAAGAGAGAGAAAGCCTGTGCAACCCCAATTCTTGGATGAATAAGGGTGTTAATT GGAAAGGCGACTGAGGGCTGATTTCCCCCTCATCCTTTTCAAACCACCTTCCGAAAAACCTCCCCCCC CTGGGGGCCCCCCGGGGAGGGCCCTGGCAAACCTCCTGCCTTTTGGGGGAAAGGGCCCGCCCCC CCGGGAAACCTGGGGGGGTTTCTTTTGGCGGGGGCCGGGGGCAAAGGGACCCCCCCCCGGGAAA AAGGGGAATTGGGCTTGTATTGCCAAAACCCGTTCCCAACACCCCAAAAACCGGGGACATTTACCG GGGGGGTAGCCGGGCTTTTTATCCAGAACTTCTTCCCTTTTGGGGGTGGCCACCCCCCAGAAGTCG CATAAACCAAGTTGCTCTATGCTTATTTTCATCTCCCTCACCTG
Kinase Domain Sequence:	>SC323475 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation GMTKGGCTGWGKTCTTTGGCGTGGTGCGCAGGGGCGAGTGGGACGCGCCCTCAGGGAAGACGGTGAGTGT GGCTGTGATGTGCTGAAGCCGATGCTCTGAGCCAGCCAGAAGCCATGGACGACTTCATCCGGGAGGTC AATGCCATGCACTCGCTCGACCACCGAAACCTCATCCGCTCTACGGGTGGTGTCTACGCCGCCATGA AGATGGTGACAGAGCTGGCACCTCTGGGATCGTTGTTGGACCGG
Restriction Sites:	Please inquire
ACCN:	NM_005781
Insert Size:	4100 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).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.
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:	<ol style="list-style-type: none"> 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_005781.4 , NP_005772.3
RefSeq Size:	4476 bp

RefSeq ORF:	3117 bp
Locus ID:	10188
UniProt ID:	Q07912
Cytogenetics:	3q29
Domains:	UBA, pkinase, TyrKc, SH3, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) is the more frequently occurring transcript and it encodes isoform 1.</p>