

Product datasheet for RC233211

STK36 (NM_001243313) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STK36 (NM_001243313) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STK36
Synonyms:	FU
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC233211 representing NM_001243313 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAAAGTACCACGTGTTGGAGATGATTGGAGAAGGCTCTTTGGGAGGGTGTACAAGGGTCAAGAA
AATACAGTGCTCAGGTCTGGCCCTGAAGTTCATCCAAAATTGGGGCGCTCAGAGAAGGAGCTGAGGAA
TTTGCAACGAGAGATTGAAATAATGCGGGTCTGCGGCATCCCAACATTGTGCATATGCTTGACAGCTTT
GAAACTGATAAAGAGGTGGTGGTGGTGACAGACTATGCTGAGGGAGAGCTCTTTCAGATCCTAGAAGATG
ACGGAAAACCTTCTGAAGACCAGGTTCCAGGCCATTGCTGCCAGTTGGTGTGAGCCCTGACTATCTGCA
TTCCCACCGCATCCTACACCGAGATATGAAGCCTCAGAACATCCTCCTCGCCAAGGGTGGTGGCATCAAG
CTCTGTGACTTTGGATTTGCCGGGCTATGAGCACCAATACAATGGTGTGACATCCATCAAAGGCACAC
CACTCTATATGTCTCCAGAGCTGGTGGAGGAGCGACCATACGACCACACAGCGGACCTCTGGTCTGTTGG
CTGCATACTATGAAGTGGCAGTAGGCACCCCTCCCTTCTATGCTACAAGCATCTTTAGCTGGTCAGC
CTCATTCTCAAGGACCTGTGCGCTGGCCCTCAACCATCAGTCCCTGCTTTAAGAACCTTCTGCAGGGAC
TGCTACCAAGACCCACGGCAGCGACTGTCTGGCCAGACCTTATATCACCCCTTTATTGCTGGTCA
TGTCAACATAAATACTGAGCCAGCAGGCCAGATTTGGGGACCCATTACCGAGCCGCTACCCCCAGAA
CTTCAGGTCTAAAGGACGAACAGGCCCATCGGTTGGCCCCAAGGGTAATCAGTCTCGCATCTTGACTC
AGGCCTATAAACGCATGGCTGAGGAGGCCATGCAGAAGAAACATCAGAACACAGGACCTGCCCTTGAGCA
AGAGGACAAGACCAGCAAGGTGGCTCCTGGCACAGCCCTCTGCCAGACTCGGGGCCACTCCTCAGGAA
TCAAGCCTCCTGGCCGGGATCTTAGCCTCAGAATTGAAGAGCAGCTGGGCTAAATCAGGGACTGGAGAGG
TGCCCTCTGCACCTCGGAAAACCGGACCACCCAGATTGTGAACGAGCATTCCAGAGGAGAGGCCAGA
GGTGTGGCCAGCGGAGCACTGATGTAGTGGACCTGGAAAATGAGGAGCCAGACAGTGAATGAGTGG
CAGCACCTGCTAGAGACCACTGAGCCTGTGCCTATTCAACTGAAGGCTCCTCTCACCTTGTGTGAATC
CTGACTTCTGCCAGCGCATCCAGAGTCACTGATGAAGCTGGAGGGCAGATCCTGAAAGGCATCTTGGA
GGGTGCTCCACATCCTGCCTGCATTCCGGGTCTGAGCAGTCTTCTCCAGCTGCAAGTATTCTGTT
GCCTTGATTCTTCTGCCGGGAGGCAGGGCTTCTGGGCTGCTGCTGAGTCTACTCAGGCACAGTCAGG



AGAGCAACAGCCTCCAGCAGCAATCTTGGTATGGGACCTTCTTACAGGACCTGATGGCTGTGATTACGGC
CTACTTTGCTGTACCTCAATCTGGAGAGGAGCCAGACAAGTGACAGCCTGCAGGTGTTTCAGGAGGCT
GCCAACCTTTTTCTGGACCTGTTGGGAAAAGTCTGGCCCAACCAGATGACTCTGAGCAGACTTTGCGGA
GGGACAGCCTTATGTGCTTACTGTCTGTGCGAAGCCATGGATGGGAACAGCCGGGCCATCTCCAAAGC
CTTTTACTCCAGCTTGTGACGACACAGCAGGTGTCTTGGATGGGCTCCTTCATGGCTTGACAGTTCCA
CAGCTCCCTGTCCACACTCCCCAAGGAGCCCCGCAAGTGAGCCAGCCACTGCGAGAGCAGAGTGAGGATA
TACCTGGAGCCATTTCTCTGCCCTGGCAGCCATATGCACTGCTCCTGTGGGACTGCCCGACTGCTGGGA
TGCCAAGGAGCAGGTCTGTTGGCATTGGCAAATCAGCTAACTGAAGACAGCAGCCAGCTCAGGCCATCC
CTCATCTCTGGCCTGCAGCATCCCATCCTGTGCCTGCACCTTCTCAAGTTCTATACTCCTGCTGCCTTG
TCAGTGAGGGCCTGTGCCGTCTTCTGGGCGAGGAGCCCTGGCCTTGAATCCCTGTTTATGTTGATTCA
GGGCAAGGTAAAAGTAGTAGATTGGGAAGAGTCTACTGAAGTGACACTCTACTTCTCTCCCTTCTGTGTC
TTTCGGCTCCAAAACCTGCCTTGTGAATGGAGAAGCTAGGCAGTGACGTTGCTACTCTCTTACCATT
CGCATGTCGTCTCTTGTGAGTGCAGCAGCCTGTCTATTGGGACAGCTTGGTCAGCAAGGGGTGACCTT
TGACCTCCAGCCCATGGAATGGATGGCTGCAGCCACACATGCCTTGTCTGCCCTGCAGAGCTCCTCACT
GAGCAGGGGAAGGCTAGCCTAATCAGGGATATGCCAGTTCAGAAATGTGGACCGTTTTGTGGCACCGCT
TCTCCATGGTCTGAGGCTCCCCGAGGAGGCATCTGCACAGGAAGGGGAGCTTTCGCTATCCAGTCCACC
AAGCCCTGAGCCAGACTGGACACTGATTTCTCCCCAGGGCATGGCAGCCCTGCTGAGCCTGGCCATGGCC
ACCTTTACCCAGGAGCCCCAGTTATGCCTGAGCTGCCTGTCCCAGCATGGAAGTATCCTCATGTCCATCC
TGAAGCATCTGCTTTGCCCCAGCTTCTGAATCAACTGCGCCAGGCGCCTCATGGGTCTGAGTTTCTCCC
TGTGCGGTGCTCTGTCTGCCAGCTCCTTGTCTCCCTTTGCGCTGGACATGGATGCTGACCTCCTT
ATAGGTGTCTTGGCCGACCTCAGGGACTCAGAAGTTGCAGCCATCTGCTGCAGGTCTGCTGCTACCATC
TTCCGTTGATGCAAGTGGAGCTGCCATCAGCCTTCTCACACGCCTGGCCCTCATGGATCCCACCTCTCT
CAACCAGTTTGTGAACACAGTGTCTGCCCTCCCCTAGAACCATCGTCTCGTTTCTCAGTTGCCCTCCTG
AGTGACCAGCCACTGTTGACCTCCGACCTTCTCTCTGCTGGCCATACTGCCAGGGTCTGTCTCCCA
GCCACTTGTCTTTATCCAAGAGCTTCTGGCTGGCTCTGATGAATCCTATCGGCCCTGCGCAGCCTCCT
GGGCCACCCAGAGAATTCTGTGCGGGCACACACTTATAGGCTCCTGGGACACTTGTCCAACACAGCATG
GCCCTGCGTGGGGCACTGCAGAGCCAGTCTGGACTGCTCAGCCTTCTGCTGCTTGGGCTTGGAGACAAGG
ATCCTGTTGTGCGGTGCAAGTCCAGCTTTGCTGTGGGCAATGCAGCCTACCAGGCTGGTCTCTGGGACC
TGCCCTGGCAGCTGCAGTCCCAGTATGACCCAGCTGCTTGGAGATCCTCAGGCTGGTATCCGGCGCAAT
GTTGCATCAGCTCTGGGCAACTTGGGACCTGAAGGTTTGGGAGAGGAGCTGTTACAGTGCGAAGTACCCC
AGCGGCTCCTAGAAATGGCATGTGGAGACCCCCAGCCAAATGTGAAGGAGGCTGCCCTCATTGCCCTCCG
GAGCCTGCAACAGGAGCCTGGCATCCATCAGGTACTGGTGTCCCTGGGTGCCAGTGAGAAACTATCCTTG
CTCTCTGTTGGGAATCAGTCACTGCCACACAGCAGTCTAGGCCTGCCTCTGCCAAACACTGCAGGAAAC
TCATTCACCTCCTGAGGCCAGCCATAGCATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC233211 representing NM_001243313
 Red=Cloning site Green=Tags(s)

MEKYHVLEMIGEGSFGRVYKGRRKYSQVVALKFIPKLRSEKELRNLQREIEIMRGLRHPNIVHMLDSF
 ETDKEVVVVDYAEGLFQILEDGKLPEDQVQIAAQLVSALYYLHSHRILHRDMKPNILLAKGGGIK
 LCDGFGARAMSTNTMVLTSIKGTPLYMSPPELVEERPVDHTADLWSVGCILYELAVGTPPFYATSIFQLVS
 LILKDPVRWPSTISPCFNFLQGLLTKDPRQRLSWPDLLYHPFIAGHVTIITEPAGPDLGTPFTSRLPPE
 LQVLKDEQAHR LAPKGNQSRILTQAYKRMAEAMQKKHQNTGPALQEDKTSKVAPGTAPLRLGATPQE
 SLLLAGILASELKSSWAKSGTGEVPSAPRENRTTPDCERAFPEERPEVLGQRSTDVVDLENEEPDSDNEW
 QHLLLETTEPVPIQLKAPLTLCCNPDFCQRIQSQLHEAGGQILKGILEGASHILPAFRVLSLLSSCSDSV
 ALYSFCREAGLPGLLLSLLRHSQESNSLQQSWYGTFLQDLMAVIQAYFACTFNLERSQTSDSLQVFQEA
 ANLFLDLLGKLLAQPDSEQLRRLDRLMCFVLCEAMDGNSRAISKAFYSSLLTTQVVLDGLLHGLTVP
 QLPVHTPQAGPQVSQPLREQSEDIPGAISSALAAICTAPVGLPDCWDAKEQVCWHLANQLTEDSSQLRPS
 LISGLQHPILCLHLLKVLVYSCCLVSEGLCRLLGQEPALLESFMLEIQGKVKVVDWEESTEVTLVYLSLLV
 FRLQNLPCGMEKLGSDVATLFTSHVSVLSVAAAACLLGQLGQQGVTFDLQPMEWMAATHALSAPAEELLT
 EQGKASLIRDMSSSEMWTVLWHRFSMVLRLPEEASAEQEGELSLSSPPSPEPDWTLISPQMAALLSLAMA
 TFTQEPQLCCLSQHGSILMSILKHLCPFLNQLRQAPHGSEFLPVVVL SVCQLL CFPFALDMDADLL
 IGVLADLRDSEVAHLLQVCCYHPLMQVELPISLLTRLALMDPTSLNQFVNTVSASPTIVSFLSVALL
 SDQPLL TSDLLSLLAHTARVLSPSHLSFIQELLAGSDESYRPLRSLGHPENSVRAHTYRLLGHLLQHSM
 ALRGALQSQSGLLSLLLLGLGDKDPVVRCSASFVGNAAQYAGPLGPALAAAVPSMTQLLGDQPAGIRRN
 VASALGNLGPGLGEELLQCEVPQRLLEMACGDPQPNVKEAALIALRSLQQEPGIHQVLSLGASEKLSL
 LSLGNQSLPHSSPRPASAKHCRKLIHLLRPAHSM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

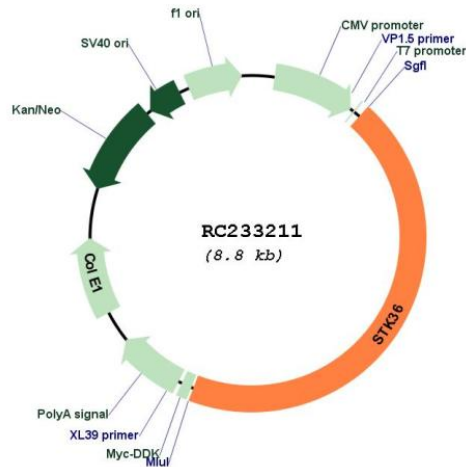
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001243313

ORF Size: 3882 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_001243313.2](#)

RefSeq Size: 4883 bp

RefSeq ORF: 3885 bp

Locus ID: 27148

UniProt ID: [Q9NRP7](#)

Cytogenetics: 2q35

Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer
MW:	142.2 kDa
Gene Summary:	<p>This gene encodes a member of the serine/threonine kinase family of enzymes. This family member is similar to a Drosophila protein that plays a key role in the Hedgehog signaling pathway. This human protein is a positive regulator of the GLI zinc-finger transcription factors. Knockout studies of the homologous mouse gene suggest that defects in this human gene may lead to congenital hydrocephalus, possibly due to a functional defect in motile cilia. Because Hedgehog signaling is frequently activated in certain kinds of gastrointestinal cancers, it has been suggested that this gene is a target for the treatment of these cancers. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Aug 2011]</p>