

Product datasheet for **RC203897**

STK3 (NM_006281) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STK3 (NM_006281) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STK3
Synonyms:	KRS1; MST2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC203897 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCAGCCGCCGCGCCTAAGAGTAACTAAAAAGCTGAGTGAAGACAGTTTGACTAAGCAGCCTG
 AAGAAGTTTTGATGTATTAGAGAAGCTTGGAGAAGGGTCTTATGGAAGTGATTTAAAGCAATACACAA
 GGAATCCGGTCAAGTTGTCGCAATTAACAAGTACCTGTTGAATCAGATCTTCAGGAAATATCAAGAA
 ATTTCCATAATGCAGCAATGTGACAGCCCATATGTTGTAAGTACTATGGCAGTTATTTAAGAATACAG
 ACCTCTGGATTGTATGGAGTACTGTGGCCTGGCTCTGTCTCAGACATAATTAGATTACGAAACAAGAC
 ATTAATAGAAGATGAAATTGCAACCATTCTAAATCTACATTGAAAGGACTAGAATATTTGCACTTTATG
 AGAAAAATACACAGAGATATAAAAGCTGGAAATATTCTCCTCAATACAGAAGGACATGCAAAATTGGCAG
 ATTTTGGAGTGGCTGGTCAAGTAAACAGATACAATGGCAAAACGCAATACTGTAATAGGAAGTCCATTTG
 GATGGCTCCTGAGGTGATTCAAGAAATAGGCTATAACTGTGTGGCCGACATCTGGTCCCTTGGCATTACT
 TCTATAGAAATGGCTGAAGGAAAACCTCCTTATGCTGATATACATCCAATGAGGGCTATTTTTATGATTC
 CCACAAATCCACCACCAACATTCAGAAAGCCAGAACTTTGGTCCGATGATTTCCACCGATTTTGTAAAAA
 GTGTTTGGTGAAGAATCCTGAGCAGAGAGCTACTGCAACACAACCTTTTACAGCATCCTTTTATCAAGAAT
 GCCAAACCTGTATCAATATTAAGAGACCTGATCAGAGAAGCTATGGAGATCAAAGCTAAAAGACATGAGG
 AACAGCAACGAGAATTGGAAGAGGAAGAAGAAATTCGGATGAAGATGAGCTGGATTCCCACACCATGGT
 GAAGACTAGTGTGGAGAGTGTGGCACCATGCGGGCCACAAGCAGATGAGTGAAGGGGCCAGACCATG
 ATTGAACATAATAGCACGATGTTGGAATCCGACTTGGGGACCATGGTGATAAACAGTGAAGGATGAGGAAG
 AAGAAGATGGAACATGAAAAGAAATGCAACCTCACCACAAGTACAAAGACCATTTTCATGGACTACTT
 TGATAAGCAAGACTTCAAGAATAAGAGTACGAAAACCTGTAATCAGAACATGCATGAACCTTCCCTATG
 TCCAAAAACGTTTTCTGATACTGGAAGTTCTCAAGATGGAGACTTTGACTTTTTGAAAAAATAA
 GTTTAGAAGAACTACAGATGCGGTTAAAAGCACTGGACCCATGATGGAACGGGAGATAGAAGAACTTCG
 TCAGAGATACACTGCGAAAAGACAGCCATTCTGGATGCGATGGATGCAAAAGAAAAGAGGCAGCAAAAC
 TTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203897 protein sequence
 Red=Cloning site Green=Tags(s)

MEQPPAPKSKLKKLSEDSLTKQPEEVFDVLEKLEGSYGSVFKAIHKESGVVAIKQVPVESDLQEIIKE
 ISIMQCDSPYVVKYYGSYFKNTDLWIVMEYCGAGSVSDIIRLNKTLIEDEIATILKSTLKGLEYLHFM
 RKIHRDIKAGNILLNTEGHAKLADFGVAGQLTDTMAKRNTVIGTPFWMAPEVIQIEIGYNCVADIWSLGIT
 SIEMAEGKPPYADIHPMRAIFMIPTNPPPTFRKPELWSDDFDFVKKCLVKNPEQRATATQLLQHPFIKN
 AKPVSILRDLITEAMEIKAKRHEEQQRELEEEEEENSDDELDSHTMVKTSVESVGTMRATSTMSEGAQTM
 IEHNSTMLESDLGTMVINSEDEEEEDGTMKRNATSPQVQRPSFMDYFDKQDFKNKSHENCNQMHEPFP
 SKNVFPDNWKPQDGFDFLKNLSLEELQMRLKALDPMEREIEELRQRYTAKRQPILDAMDAKRRQQN
 F

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6198_f05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_006281

ORF Size: 1473 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_006281.4](#)

RefSeq Size: 2828 bp

RefSeq ORF: 1476 bp

Locus ID: 6788

UniProt ID: [Q13188](#)

Cytogenetics: 8q22.2

Domains: pkinase, TyrKc, S_TKc

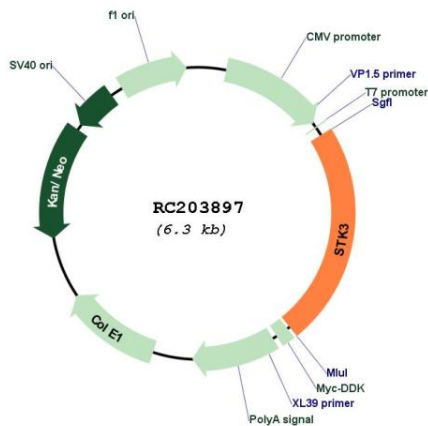
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: MAPK signaling pathway

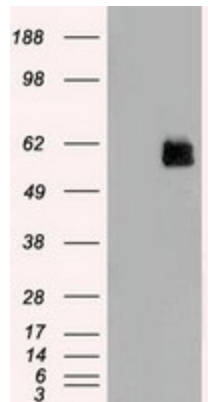
MW: 56.3 kDa

Gene Summary: This gene encodes a serine/threonine protein kinase activated by proapoptotic molecules indicating the encoded protein functions as a growth suppressor. Cleavage of the protein product by caspase removes the inhibitory C-terminal portion. The N-terminal portion is transported to the nucleus where it homodimerizes to form the active kinase which promotes the condensation of chromatin during apoptosis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

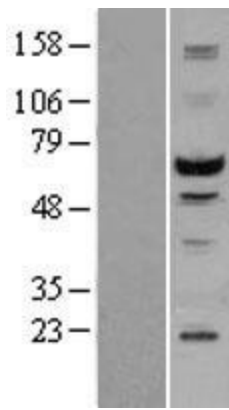
Product images:



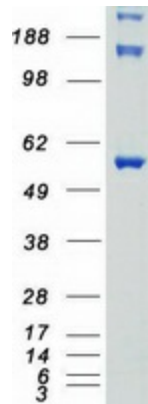
Circular map for RC203897



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY STK3 (Cat# RC203897, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-STK3 (Cat# [TA500408]). Positive lysates [LY401892] (100ug) and [LC401892] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401892]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203897 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STK3 protein (Cat# [TP303897]). The protein was produced from HEK293T cells transfected with STK3 cDNA clone (Cat# RC203897) using MegaTran 2.0 (Cat# [TT210002]).