

Product datasheet for **RC200566**

STK16 (NM_003691) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STK16 (NM_003691) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STK16
Synonyms:	FLJ39635; KRCT; KRCT, MPSK, TSF1, PKL12, FLJ39635; MPSK; PKL12; protein kinase expressed in day 12 fetal liver; serine/threonine kinase 16; TSF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200566 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCCACGCGTGTGTCTGCTCTCGGGAACTGTCATCATTGACAATAAGCGCTACCTCTTCATCC
AGAACTGGGGAGGGTGGGTTTCAGCTATGTGGACCTAGTGGAAGGGTTACATGATGGACTTCTACGC
CCTGAAGCGAATCCTGTGTACAGAGCAGCAGGACCGGGAGGAGGCCAGCGAGAAGCCGACATGCATCGC
CTCTTCAATCACCCCAACATCCTTCGCCTCGTGGCTTACTGTCTGAGGGAACGGGGTCTAAGCATGAGG
CCTGGCTGCTGCTACCATCTTCAAGAGAGGTACGCTGTGGAATGAGATAGAAAGGCTGAAGGACAAAGG
CAACTTCTGACCGAGGATCAAATCCTTTGGCTGCTGCTGGGGATCTGCAGAGGCCTTGAGGCCATTCAT
GCCAAGGGTTATGCCACAGAGACTTGAAGCCCAATATATTGCTTGGAGATGAGGGGCAGCCAGTTT
TAATGGACTTGGGTTCCATGAATCAAGCATGCATCCATGTGGAGGGCTCCCGCCAGGCTCTGACCCCTGCA
GGACTGGGCAGCCAGCGGTGCACCATCTCCTACCGAGCCCAAGAGCTTCTCTGTGCAGAGTCACTGT
GTCATCGATGAGCGGACTGATGTCTGGTCCCTAGGCTGCGTGCTATATGCCATGATGTTTGGGGAAGGCC
CTTATGACATGGTGTCCAAAAGGGTGACAGTGTGGCCCTTGCTGTGCAGAACCAACTCAGCATCCACACA
AAGCCCCAGGCATTCTTCAGCATTGTGGCAGCTCCTGAACTCGATGATGACCGTGGACCCGCATCAGCGT
CCTCACATTCTCTCCTCCTCAGTCAGCTGGAGGCGTGCAGCCCCAGCTCCTGGCCAACATACTACCC
AAATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC200566 protein sequence
Red=Cloning site Green=Tags(s)

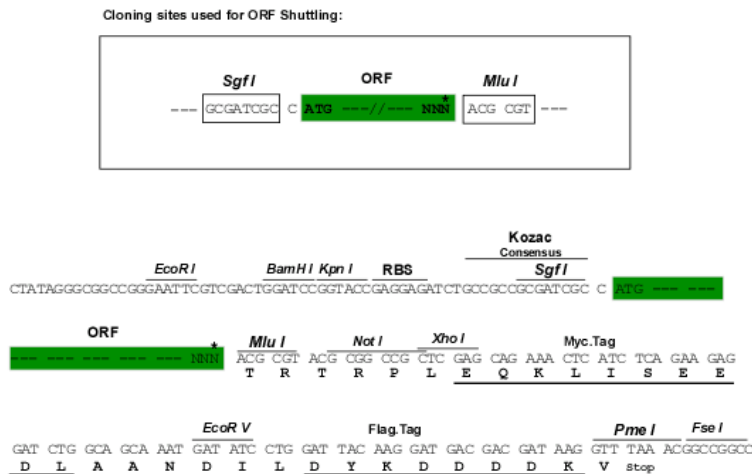
MGHALCVCSRGTVIIDNKRYLFIQKLGGGF SYVDLVEGLHDGHFYALKRILCHEQQDREEAQREADMHR
 LFNHPNILLRLVAYCLRERGAKEAWLLLPFFKRGTLWNEIERLKDKGNFLTEDQILWLLLGICRGLAIIH
 AKGYAHRDLKPTNILLGDEGQPVLMDLGSMNQACIHVEGSRQAL TLQDWAQRCTISYRAPELFSVQSHC
 VIDERTDVWSLGCYLYAMMFEGEPYDMVFKGDSVALAVQNQLSIPQSPRHSSALWQLLNSMMTVDPHQR
 PHIPLLLSQLEALQPPAPGQHTTQI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6065_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_003691

ORF Size: 915 bp

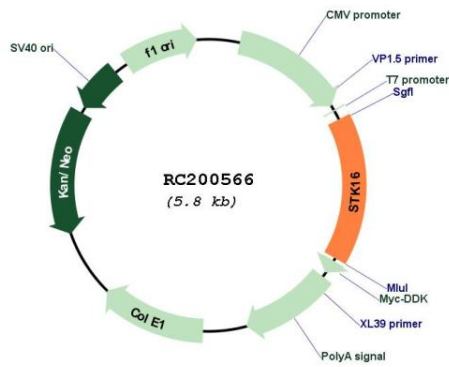
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

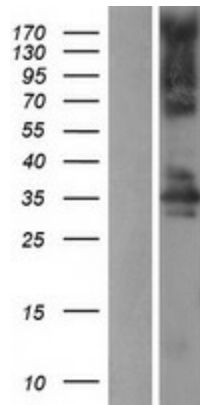
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_003691.2</u> , <u>NP_003682.2</u>
RefSeq Size:	1682 bp
RefSeq ORF:	917 bp
Locus ID:	8576
Cytogenetics:	2q35
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
MW:	34.7 kDa
Gene Summary:	Membrane-associated protein kinase that phosphorylates on serine and threonine residues. In vitro substrates include DRG1, ENO1 and EIF4EBP1. Also autophosphorylates. May be involved in secretory vesicle trafficking or intracellular signaling. May have a role in regulating stromal-epithelial interactions that occur during ductal morphogenesis in the mammary gland. May be involved in TGF-beta signaling. Able to autophosphorylate on Tyr residue; it is however unclear whether it has tyrosine-protein kinase toward other proteins. [UniProtKB/Swiss-Prot Function]

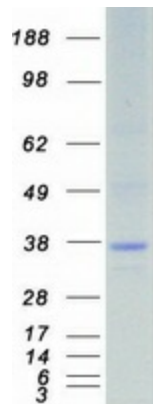
Product images:



Circular map for RC200566



Western blot validation of overexpression lysate (Cat# [LY418496]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200566 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STK16 protein (Cat# [TP300566]). The protein was produced from HEK293T cells transfected with STK16 cDNA clone (Cat# RC200566) using MegaTran 2.0 (Cat# [TT210002]).