

## Product datasheet for RC219087

### STK16 (NM\_001008910) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	STK16 (NM_001008910) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STK16
Synonyms:	hPSK; KRCT; MPSK; PKL12; PSK; TSF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219087 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCCACGCGCTGTGTCTGCTCTCGGGAACTGTCATCATTGACAATAAGCGCTACCTTTTCATCC  
AGAACTGGGGAGGGTGGGTTTCAGCTATGTGGACCTAGTGAAGGGTTACATGATGGACACTTCTACGC  
CCTGAAGCGAATCCTGTGTACGAGCAGCAGGACCGGGAGGAGGCCAGCGAGAAGCCGACATGCATCGC  
CTCTTCAATCACCCCAACATCCTTCGCCTCGTGGCTTACTGTCTGAGGGAACGGGTGCTAAGCATGAGG  
CCTGGCTGCTGCTACCATTCTTCAAGAGAGGTACGCTGTGGAATGAGATAGAAAGGCTGAAGGACAAAGG  
CAACTTCTGACCGAGGATCAAATCCTTTGGCTGCTGCTGGGGATCTGCAGAGGCCCTTGAGGCCATTCAT  
GCCAAGGGTTATGCCACAGAGACTTGAAGCCCAATATATTGCTTGAGATGAGGGGAGCCAGTTT  
TAATGGACTTGGGTTCCATGAATCAAGCATGCATCCATGTGGAGGGCTCCCGCCAGGCTCTGACCCTGCA  
GGACTGGGCGAGCCAGCGGTGCACCATCTCCTACCGAGCCCCAGAGCTTCTCTGTGACAGATCACTGT  
GTCATCGATGAGCGGACTGATGTCTGGTCCCTAGGCTGCGTGCTATATGCCATGATGTTTGGGAAGGCC  
CTTATGACATGGTGTCCAAAAGGGTGACAGTGTGCCCTTGCTGTGCAGAACCAACTCAGCATCCCACA  
AAGCCCCAGGCATTCTTCAGCATTGTGGCAGCTCCTGAACTCGATGATGACCGTGGACCCGCATCAGCGT  
CCTCACATTCCTCTCCTCCTCAGTCAGCTGGAGGCGCTGCAGCCCCAGCTCTGGCCAACATACTACCC  
AAATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC219087 protein sequence  
Red=Cloning site Green=Tags(s)

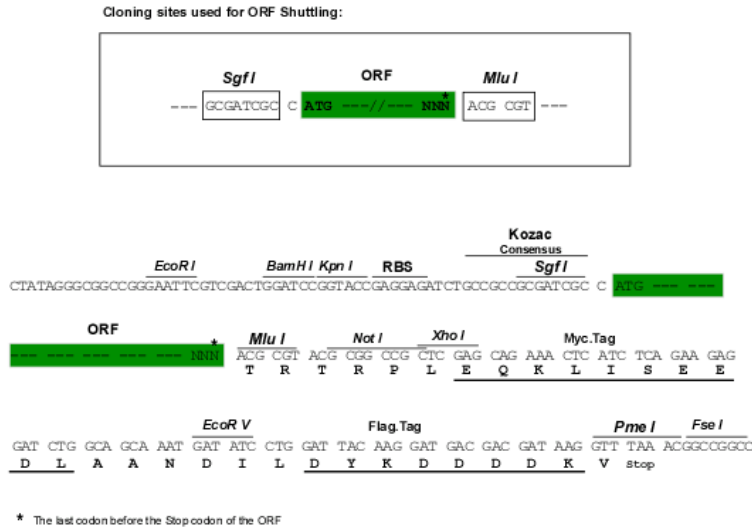
MGHALCVCSRGTVIDNKRYLFIQKLGEVGF SYVDLVEGLHDGHFYALKRILCHEQQDREEAQREADMHR  
 LFNHPNILLRLVAYCLRERGAKEAWLLLPFFKRGTLWNEIERLKDKGNFLTEDQILWLLLGICRGLAIIH  
 AKGYAHRDLKPTNILLGDEGQPVLMDLGSMNQACIHVEGSRQAL TLQDWAQRCTISYRAPELFSVQSHC  
 VIDERTDVWSLGCVL YAMMFGE GPYDMVFQKGD SVALAVQNQLSIPQSPRHSSALWQLLNSMMTVDPHQ  
 RPHIPLLLSQLEALQPPAPGQHTTQI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6386\\_d03.zip](https://cdn.origene.com/chromatograms/mk6386_d03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001008910

**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:**

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\\_001008910.4](#)

**RefSeq Size:** 2903 bp

**RefSeq ORF:** 918 bp

**Locus ID:** 8576

**UniProt ID:** [O75716](#)

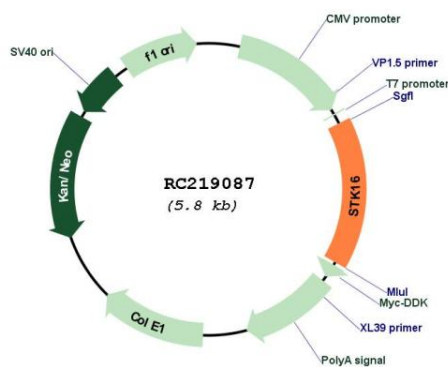
**Cytogenetics:** 2q35

**Protein Families:** Druggable Genome, Protein Kinase

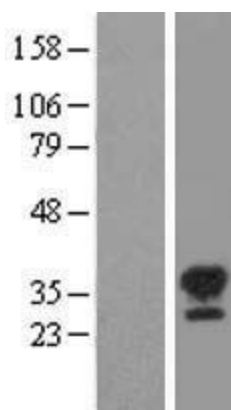
**MW:** 34.7 kDa

**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]

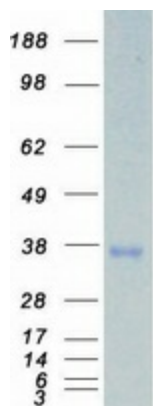
## Product images:



Circular map for RC219087



Western blot validation of overexpression lysate (Cat# [LY422898]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219087 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STK16 protein (Cat# [TP319087]). The protein was produced from HEK293T cells transfected with STK16 cDNA clone (Cat# RC219087) using MegaTran 2.0 (Cat# [TT210002]).