

Product datasheet for **RC203605**

HSPC302 (TBCK) (NM_033115) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSPC302 (TBCK) (NM_033115) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSPC302
Synonyms:	HSPC302; IHPRF3; TBCKL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC203605 representing NM_033115
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTCCCTGAAGGACGCTGAAATGGGAGCCTTACCTTCTTTGCCTCGGCTCTGCCACATGATGTTT
 GTGGAAGCAATGGACTTCTCTCACACCAAATTCATCAAAATTTAGGGCGCTTTCAAAATCCTTAAAC
 CATCACCCATCCCAGACTCTGCCAGTATGTGGATATTTCTAGGGGAAAGCATGAACGACTAGTGGTCGTG
 GCTGAACATTGTGAACGTAGTCTGGAAGACTTGCTTCGAGAAAGGAAACCTGTGAGGTATCCCTCGTACT
 TGGCCCTGAGGTAATTGCACAGGGAATTTCAAACCACTGATCACATGCCAAGTAAAAACCATTGCC
 TTCTGGCCCCAAATCAGATGTATGGTCTCTTGAATCATTTTTATTTGAGCTTTGTGTGGGAAGAAAATTA
 TTTCAGAGCTTGATATTTCTGAAAGACTAAAAATTTTGGTACTTTGGATTGTGTAGATGACACTTTAA
 TAGTTCTGGCTGAAGAGCATGGTTGTTGGACATTATAAAGGAGCTTCTGAAACTGTGATAGATCTTTT
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 TCAAACAGCAATAATGAGTTGTCTGCAGCTGCCACGCTCCCTTAAATCATCAGAGAGAAGGATACAGAGT
 ACCATAAATAGAATTATTCTCTTCGACAGGCTGCTAAAGGCTTATCCATATAAAAAAACCAAAATCTG
 GAAAGAAGCAAGAGTTGACATTCCTCTTATGAGAGGTTAACTGGGCTGCTTTCTGGGAGTTGAG
 GGAGCTATTCATGCCAAGTACGATGCAATTGATAAAGACTCCAATTCTACAGATAGACAAAATTGAAG
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 TGTATTAAGGCTGGGTAGTGTCTCATCTGATCTTGTGATTGGCAAGGCTTGTACTCACTTTGTGCT
 CCATTCCTATATCAAACCTCAATAATGAAGCCTTGGCTTATGCATGTATGTCTGCTTTTATCCCAAAT
 ACCTGTATAACTTCTTCTAAAAGACAACCTCACATGTAATACAAGAGTATCTGACTGTCTCTCTCAGAT
 GATTGCATTTTCATGATCCAGAGCTGAGTAATCATCTCAATGAGATTGGTTTCATTCCAGATCTCTATGCC
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 CAAAGCCATCTTCTGACAGCAGTGGAGGAGAAGTTCCGGCACCTTATTTCTCTGCTGAGTGTCCAGATCC
 TCCAAAGACAGATCTGTCAAGAGAATCCATCCCATTAATGACCTGAAGTCAGAAGTATCACCACGGATT
 TCAGCAGAGGACCTGATTGACTTGTGTGAGCTCACAGTGCAGGCCACTTCAAACACCCAGCAAGAAAA
 CAAAGTCCAGTAAACCAAAGCTCCTGGTGGTTGACATCCGGAATAGTGAAGACTTTATTCGTGGTACAT
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 AAAGCCAACAGGCCTCCTCACCATCCCATCTCCTCAAATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203605 representing NM_033115
Red=Cloning site Green=Tags(s)

MFPLKDAEMGAFTFFASALPHDVCNGSLPLTPNSIKILGRFQILKTITHPRLCQYVDISRKHERLVVV
AEHCERSLEDLLRERKPVRYPSYLAPEVIAQGIFKTTDHMPKSKPLPSGPKSDVWSLGIILFELCVGRKL
FQSLDISERLKFLLTDCVDDTLIVLAEHGCGLDIKELPETVIDLLNKCLTFHPSKRPTPELMKDKVF
SEVSPLYTPFTKPASLFSSSLRCADLTLPEDISQLCKDINNDYLAERSIEEVYYLWCLAGGDLEKELVNK
EIIIRSKPPICTLPNFLFEDGESFGQGRDRSSLLDDTTVTLSLCQLRNRLKDVGGEAFYPLLEDDQSNLPH
SNSNNELSAATLPLIIREKDTEYQLNRIILFDRLLKAYPYKKNQIWKEARVDIPPLMRGLTWAALLGVE
GAIHAKYDAIDKDTPIPTDRQIEVDIPRCHQYDELLSSPEGHAKFRRVLKAWVVSHPDLVYWQGLDSLCA
PFLYLNFNNEALAYACMSAFIPKYLNFFLKDNSHVIQEYLVFVSMIAFHDPESNLHNEIGFIPDLYA
IPWFLTMFTHVFPLHKIFHLWDTLLGNSSFPFCIGVAIQQLRDRLLANGFNECILLFSDLPEIDIERC
VRESINLFCWTPKSATYRQHAQPPKSSDSSGGRSSAPYFSAECPDPPKTDLSRESIPLNDLKSEVSPRI
SAEDLIDLCELTVTGHFKTPSKTKSSPKLLVVDIRNSED FIRGHISGSINIPFSAFTAEGELTQGPY
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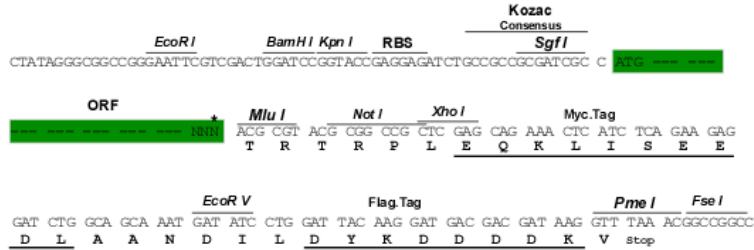
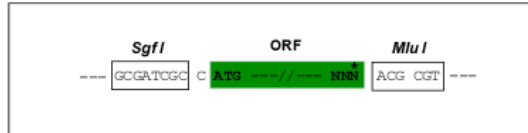
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4141_f07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_033115

ORF Size: 2490 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_033115.4](#), [NP_149106.2](#)

RefSeq Size: 3325 bp

RefSeq ORF: 2493 bp

Locus ID: 93627

UniProt ID: [Q8TEA7](#)

Cytogenetics: 4q24

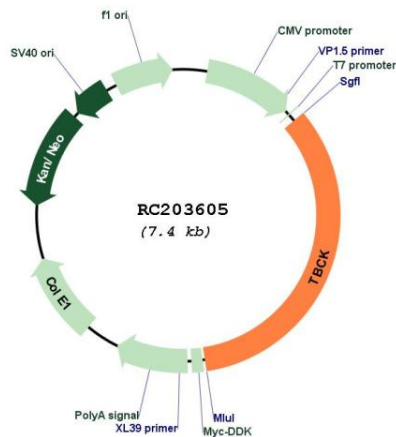
Domains: TBC, pkinase, RHOD, S_TKc

Protein Families: Druggable Genome, Protein Kinase

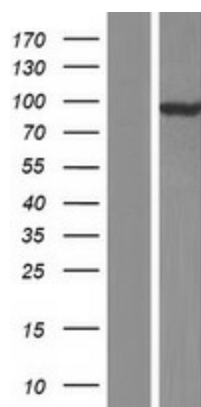
MW: 93.5 kDa

Gene Summary: This gene encodes a protein that contains a protein kinase domain, a Rhodanase-like domain and the Tre-2/Bub2/Cdc16 (TBC) domain. The encoded protein is thought to play a role in actin organization, cell growth and cell proliferation by regulating the mammalian target of the rapamycin (mTOR) signaling pathway. This protein may also be involved in the transcriptional regulation of the components of the mTOR complex. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]

Product images:



Circular map for RC203605



Western blot validation of overexpression lysate (Cat# [LY409720]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203605 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).