

Product datasheet for **RC222370**

DOK3 (NM_024872) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DOK3 (NM_024872) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DOK3
Synonyms:	DOKL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC222370 representing NM_024872
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACTCGGGGAGCCAGACTGCGATCAGACCGCGTGCCAGCTGAACCAGCTGTCTCTGGACGGAGGGA
 CGGAAGTGGCCAGAAGGGGAAGTGTGAGGAGTCCCGTCCAGCCTGTCACTCAGTCTCCCAAGTCTTGA
 AGCGGGCGCCCTGCTCCTGGCCGTGACCATGGACCCTCTGGAGACCCCTATCAAGGATGGATCCTCTAC
 CAGCAGCATGTCAAGTTTGGCAAGAAGTCTGGCGGAAGGTGTGGGCTCTGCTGTATGCAGGAGGCCAT
 CAGGCGTGGCACGGCTGGAGAGCTGGGAGTCCGGATGGTGGCCTGGGAGCAGCGGGTACAGGTCTGGC
 AGGGCTGGCCGGCAGGGGAGCGACGGGTATCCGCCTGGTACTGTGTGTCCGTGCTCCGGCTGAC
 GCGGAGAGCTGCCCCGGGACACCGTGCCTTCTGCTCACCACCACCGAGCGAAGCCATCTACTGGCTG
 CTACGACCGCCAGGCCGGATGGGCCCATCTGCCAGCTGGCCTTCCCGGGACAGGGGAGGCCCTCCTC
 AGGATCCACAGATGCCAGTCTCCAAGAGGGCCTGGTCCCATGGAGGAAAATCCATCTACTCTCC
 TGGCAGGAAGTGGCGAGTTTCCCGTGGTGGTGCAGAGGACTGAGGCCGCCACCCGCTGCCAGCTGAAGG
 GGCCGGCCCTGCTGGTGTGGGCCAGACGCCATCCAGCTGAGGGAGGCCAAGGGCACCCAGGCCCTCTA
 CAGCTGGCCCTACCACTTCTGCGCAAGCTCGGCTCCGACAAGGGCGTGTCTCCTTTGAGGCCGGCCGT
 CGCTGCCACTCGGGTGGGGCCTCTTGGCTTACGACCCCTGTGCCCTGACCTGTGCAGGGCTGTGG
 CCGGGCCATCGCCGCCAGCGGGAGCGGCTGCCAGAGCTGACCAGGCCCCAGCCCTGCCCTGCCACG
 GGCCACCTCTCTGCCCTCCCTGGACACCCCGGAGAGCTTCGGGAGATGCCACCAGGACCTGAGCCACCC
 ACGTCCAGGAAAATGCACCTGGCCGAGCCCGACCCAGAGCCTGCCGCTACTGCTAGGCCCGAGCCCA
 ACGATCTGGCGTCCGGCTCTACGCTTCAAGTGTGCAAGCGTGCAGTGGGCCCCAGGCAATGAGCACCT
 CTATGAGAACCTGTGTGTGCTGGAGGCCAGCCACGCTGCACGGTGGGGAACCTGAGCCGACGAGGGC
 CCCGGCAGCCGACGCCACAACAGTCCCATCTACCACAACGGCCAGGACTTGAGCTGGCCCGGCCGG
 CCAACGACAGTACCCTGGAGGCCAGTACCGCGGCTGCTGGAGCTGGATCAGGTGGAGGCCACAGGCCG
 CCCTGACCCTCAGGCAGGTTTCAAGGCCAAGCTGGTGACCCTGCTGAGTCGTGAGCGGAGGAAGGCCCA
 GCCCTTGTGACCGGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222370 representing NM_024872
 Red=Cloning site Green=Tags(s)

MTRGARLRSDARAQLNQLSLDGGTGSQKKGKCEFPSSLSSVSPGLEAAALLLAVTMDPLETPIKDGILY
 QQHVKFGKKCWRKVWALLYAGGPGVARLESWEVRDGLGAAGDRSAGPGRRGERRVIRLADCVSVLPAD
 GESCPDRTGAFLLTTTTERSHLLAAQHRQAWMPICQLAFPGTGEASSGSDAQSPKRGLVPMEENSIYSS
 WQEVGEFPVVVQRTEAATRCQLKGPALLVLGPDAIQLREAKGTQALYSWPYHFLRKLGSDDKGVFSFEAGR
 RCHSGEGLFAFSTPCAPDL CRAVAGAIARQRRLPEL TRPQPCPLPRATSLPSLDTPGELREMPGPEPP
 TSRKMHLEAPGPQSLPLLLGPEPNDLASGLYASVCKRASGPPGNEHLYENLCVLEASPTLHGGEPEPHEG
 PGRSPTTSPYHNGQDL SWPGPANDSTLEAQYRRLLELDQVEGTGRPDPQAGFKAKLVTL SRERRKGP
 APCDRP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8041_c04.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_024872

ORF Size: 1488 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_024872.1](#), [NP_079148.1](#)

RefSeq Size: 1762 bp

RefSeq ORF: 1323 bp

Locus ID: 79930

UniProt ID: [Q7L591](#)

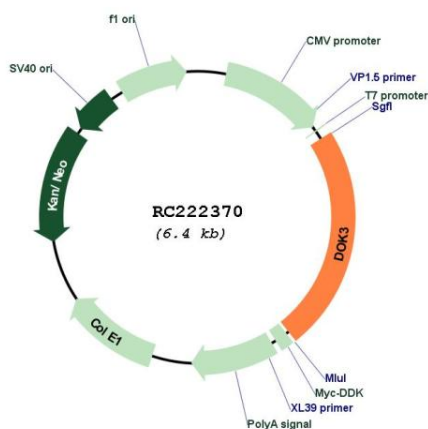
Cytogenetics: 5q35.3

Protein Families: Druggable Genome

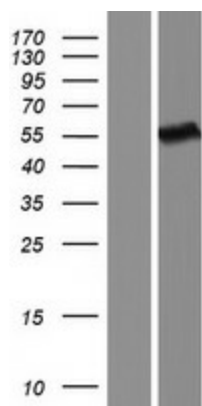
MW: 53.1 kDa

Gene Summary: DOK proteins are enzymatically inert adaptor or scaffolding proteins. They provide a docking platform for the assembly of multimolecular signaling complexes. DOK3 is a negative regulator of JNK signaling in B-cells through interaction with INPP5D/SHIP1. May modulate ABL1 function (By similarity).[UniProtKB/Swiss-Prot Function]

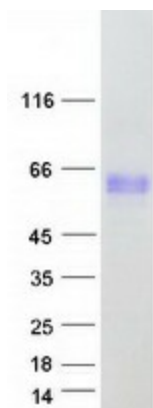
Product images:



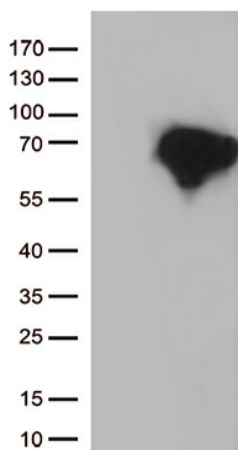
Circular map for RC222370



Western blot validation of overexpression lysate (Cat# [LY411036]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222370 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DOK3 protein (Cat# [TP322370]). The protein was produced from HEK293T cells transfected with DOK3 cDNA clone (Cat# RC222370) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DOK3 (Cat# RC222370, 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-DOK3 (Cat# [TA813140])(1:500).