

Product datasheet for RC211718

DOK5 (NM_018431) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DOK5 (NM_018431) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DOK5
Synonyms:	C20orf180; IRS-6; IRS6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211718 representing NM_018431 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTCCAATTTAATGACATAGTGAAGCAAGGGTACGTGAGGATCCGGAGCAGACGCCTCGGGATTT
ATCAGCGATGCTGGTTAGTATTCAGAAAGCTTCAAGCAAAGGTCCAAAAAGACTGGAGAAATTTCTGA
TGAACGTGCTGCATATTCAGGTGTTATCATAAGGTTACAGAACTCAATAATGTGAAGAACGTAGCTCGA
TTGCCAAAAAGCACCAAGAAACATGCCATAGGGATTTATTTCAATGACGATACCTCAAGACTTTTGCTT
GCGAATCAGATCTTGAGGCTGATGAGTGGTGCAAAGTACTCCAGATGGAGTGTGTAGGAACCGGATCAA
TGACATCAGCCTTGAGAGCCTGACTTACTGGCCACTGGGGTTGAGAGAGAACAGAGTGAGAGATTCAAT
GTGATTTTGATGCCATCTCCTAACTTAGATGTACATGGCGAATGTGCCTTGACAGATTACATATGAGTATA
TCTGTCTTTGGGACGTCCAGAATCCCAGAGTCAAATCATCTCTTGGCCGCTAAGCGCCCTGCGCGGGTA
TGGACGTGATACTACGTGGTTCACCTTTGAGGCAGGGAGGATGTGTGAGACTGGTGAAGGGCTGTTATC
TTTCAGACCCGAGACGGGGAGGCCATCTATCAGAAAGTCCACTCTGCTGCCTTGGCCATAGCCGAGCAGC
ACGAGCGCTTGCTACAGAGTGTGAAAACTCGATGCTCCAGATGAAGATGAGTGAGCGGGCCGCTCGCT
GAGCACCATGGTCCCCCTGCCTCGCAGCGCCTACTGGCAGCACATCACACGGCAGCACAGCAGGGACAG
CTCTACCGCTTGCAAGATGTTCCAGCCCTCTGAAGCTTCATCGAACAGAGACTTTTCCAGCCTACAGAT
CTGAGCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC211718 representing NM_018431
Red=Cloning site Green=Tags(s)

MASNFNDIVKQGYVRIRSRRLGIYQRCWLVFKKASSKGPKRLEKFSDERAAYFRCYHKVTELNNVKNVAR
 LPKSTKKHAIGIYFNDDTSKTFACESDLEADWCKVLQMECVGTRINDISLGEPELLATGVEREQSERFN
 VYLMPSPLNDVHGECALQITYEYICLWDVQNPVKLISWPLSALRRYGRDITWTFEAGRMCEGEGFLI
 FQTRDGEAIYQKVHSAALAIAEQHERLLQSVKNSMLQMKMSERAASLSTMVPLPR SAYWQHITRQHSTGQ
 LYRLQDVSSPLKLRHRTETFPAYRSEH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6172_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_018431

ORF Size: 918 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_018431.5](#)

RefSeq Size: 1833 bp

RefSeq ORF: 921 bp

Locus ID: 55816

UniProt ID: [Q9P104](#)

Cytogenetics: 20q13.2

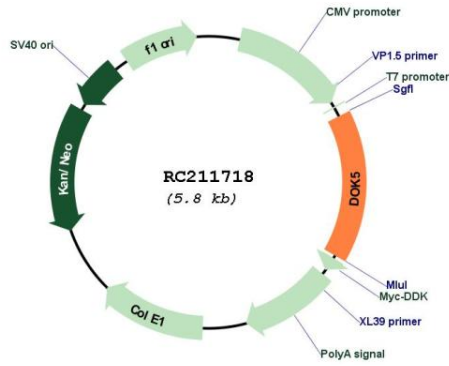
Domains: PH, IRS

Protein Families: Druggable Genome

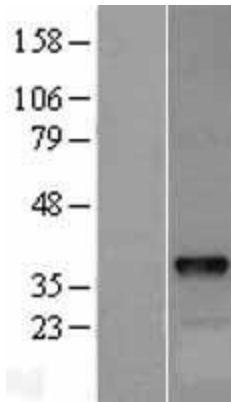
MW: 35.3 kDa

Gene Summary: The protein encoded by this gene is a member of the DOK family of membrane proteins, which are adapter proteins involved in signal transduction. The encoded protein interacts with phosphorylated receptor tyrosine kinases to mediate neurite outgrowth and activation of the MAP kinase pathway. Unlike other DOK family proteins, this protein does not interact with RASGAP. This protein is up-regulated in patients with systemic sclerosis and is associated with fibrosis induced by insulin-like growth factor binding protein 5. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jun 2014]

Product images:



Circular map for RC211718



Western blot validation of overexpression lysate (Cat# [LY402687]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211718 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).