

Product datasheet for RC200640

DUSP4 (NM_001394) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DUSP4 (NM_001394) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DUSP4
Synonyms:	HVH2; MKP-2; MKP2; TYP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200640 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGACGATGGAGGAGCTGCGGGAGATGGACTGCACTGTGCTCAAAGGCTGATGAACCGGGACGAGA
ATGGCGGCGGGCGGGCGGCAGCGGCAGCCACGGCACCCGTTGGGGCTGCCGAGCGGGCAAGTGCCTGCT
GCTGGACTGCAGACCGTTCCTGGCGCACAGCGGGCTACATCCTAGGTTCCGGTCAACGTGCGCTGTAAC
ACCATCGTGGCGGGCGGGCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCGAGGAGGAGTAC
GCGCCCGCTTGGCTCCGGCCTCTACTCGGCGGTTCATCGTCTACGACGAGCGCAGCCCGCGCCGAGAG
CCTCCCGGAGGACAGCACCGTGTGCTGGTGGTGCAGGCCTGCGCCGCAACGCCGAGCGCACCGACATC
TGCTGCTCAAAGGCGGCTATGAGAGGTTTTCTCCGAGTACCCAGAATTCTGTTCTAAAACCAAGGCC
TGGCAGCCATCCCACCCCGGTTCCCCCAGCGCCACAGAGCCCTTGGACCTGGGCTGCAGCTCCTGTGG
GACCCACTACACGACCAGGGGGTCTGTGGAGATCCTCCCTTCTCTACCTCGGCAGTGCCTACCAT
GCTGCCCGGAGAGACATGCTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCTCGGACTGCCAA
ACCACTTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGAAGATAAACCACAAGGCCGACATCAGTCT
CTGGTTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGCGCGTGTGGTGCAGTGC
CAGGCGGGCATCTCGCGTCCGCCACCATCTGCCTGGCCTACCTGATGATGAAGAAGGAGGAGGCTGG
AGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGAGCATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCT
GCTGCAGTTCGAGTCCCAGGTGCTGGCCAGTCTGTGCTGCGGAGGCTGCTAGCCCTCGGGACCCCTG
CGGGAGCGGGCAAGACCCCGCCACCCACCTCGCAGTTCGTCTTCAGCTTCCGGTCTCCGTGGGCG
TGCACTCGGCCCCAGCAGCCTGCCCTACCTGCACAGCCCATCACACCTCTCCAGCTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200640 protein sequence
Red=Cloning site Green=Tags(s)

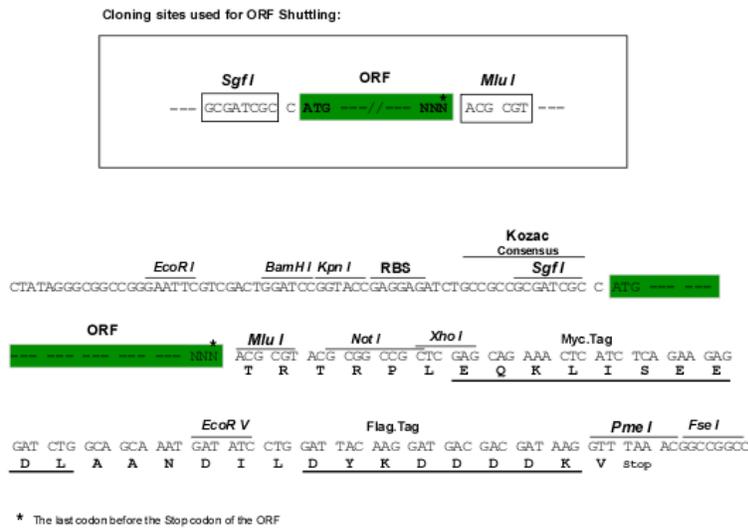
MVTMEELREMDCSVLKRLMNRDENGSGAGGSGSHGTLGLPSGGKCLLLDCRPFLAHSAGYILGSVNVRCN
 TIVRRRAKGSVSLEQILPAEEVRRARLRSLYSVAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDI
 CLLKGGYERFSSEYPEFCSKTKALAAIPPPVPSATEPLDLGCSSCGTPLHDQGGPVEILPFLYLGSAYH
 AARRDMLDALGITALLNVSSDCPNHFEGHYQYKICIPVEDNHKADISSWFMEAIEYIDAVKDCRGRVLVHC
 QAGISRSATICLAYLMMKKRVRLLEEAFEFVKQRRSIIISPNFSFMGQLLQFESQVLATSCAAEAASPSGPL
 RERGKTPATPTSQFVFSFPVSVGVHSAPSSLPYLHSPITTPSC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6153_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001394

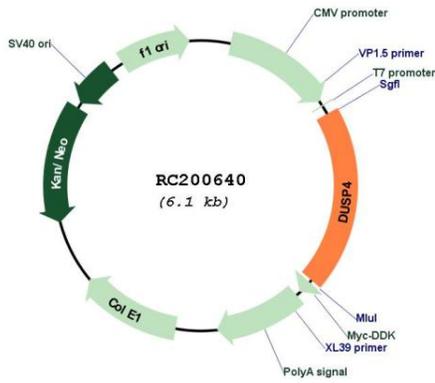
ORF Size: 1182 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

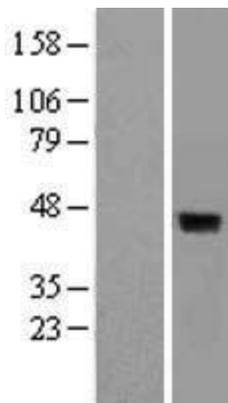
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
RefSeq:	NM_001394.4
RefSeq Size:	5625 bp
RefSeq ORF:	1185 bp
Locus ID:	1846
UniProt ID:	Q13115
Cytogenetics:	8p12
Domains:	DSPc, RHOD, PTPc_motif
Protein Families:	Phosphatase
Protein Pathways:	MAPK signaling pathway
MW:	43 kDa
Gene Summary:	<p>The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK1, ERK2 and JNK, is expressed in a variety of tissues, and is localized in the nucleus. Two alternatively spliced transcript variants, encoding distinct isoforms, have been observed for this gene. In addition, multiple polyadenylation sites have been reported. [provided by RefSeq, Jul 2008]</p>

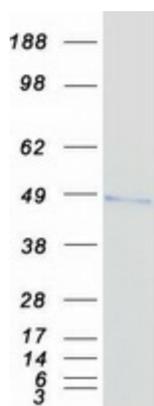
Product images:



Circular map for RC200640



Western blot validation of overexpression lysate (Cat# [LY400543]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200640 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DUSP4 protein (Cat# [TP300640]). The protein was produced from HEK293T cells transfected with DUSP4 cDNA clone (Cat# RC200640) using MegaTran 2.0 (Cat# [TT210002]).