

## Product datasheet for **RG200640**

### DUSP4 (NM\_001394) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DUSP4 (NM_001394) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DUSP4
Synonyms:	HVH2; MKP-2; MKP2; TYP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200640 representing NM_001394 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGACGATGGAGGAGCTGCGGGAGATGGACTGCAAGTGTGCTCAAAGGCTGATGAACCGGGACGAGA  
ATGGCGGGCGCGGGCGGCAGCGGCAGCCACGGCACCCGTTGGGGTGGCAGCGGGCGCAAGTGCCTGCT  
GCTGGACTGCAGACCGTTCCTGGCGCACAGCGGGCTACATCCTAGGTTTCGGTCAACGTGCGCTGTAAC  
ACCATCGTGGCGGGCGGGCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCGAGGAGGAGGTAC  
GCGCCCGCTTGGCTCCGGCCTCTACTCGGCGGTTCATCGTCTACGACGAGCGCAGCCCGCGCCGAGAG  
CCTCCCGGAGGACAGCACCGTGTGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAGCGCACCGACATC  
TGCTGCTCAAAGGCGGCTATGAGAGGTTTTCTCCGAGTACCCAGAATTCTGTTCTAAAACCAAGGCC  
TGGCAGCCATCCCACCCCGGTTCCCCCAGCGCCACAGAGCCCTTGGACCTGGGCTGCAGCTCCTGTGG  
GACCCACTACACGACCAGGGGGTCTGTGGAGATCCTCCCTTCTCTACCTCGGAGTGCCTACCAT  
GCTGCCCGGAGAGACATGCTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCAA  
ACCACTTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGAAGATAAACCACAAGGCCGACATCAGCTC  
CTGTTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGCGTGTGGTGCAGTGC  
CAGGCGGGCATCTCGCGTGGCCACCATCGCTGGCCTACCTGATGATGAAGAAGGAGGAGGCTGG  
AGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGAGCATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCT  
GCTGCAGTTCGAGTCCCAGGTGCTGGCCAGTCTGTGCTGCGGAGGCTGCTAGCCCTCGGGACCCCTG  
CGGGAGCGGGCAAGACCCCGCCACCCACCTCGCAGTTCGTCTTCAGCTTTCGGTCTCCGTGGGCG  
TGCACTCGGCCCCAGCAGCCTGCCCTACCTGCACAGCCCATCACACCTCTCCAGCTGT

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG200640 representing NM\_001394  
 Red=Cloning site Green=Tags(s)

MVTMEELREMDCSVLKRLMNRDENGSGAGGSGSHGTLGLPSGGKCLLLDCRPFLAHSAGYILGSVNVRCN  
 TIVRRRAKGSVLEQILPAEEVVRARLRSLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDI  
 CLLKGGYERFSSEYPEFCSKTKALAAIPPPVPPSATEPLDLGCSSCGTPLHDQGGPVEILPFLYLGSAHY  
 AARRDMLDALGITALLNVSSDCPNHFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGRVLVHC  
 QAGISRSATICLAYLMMKKRVRLLEEAFEFVKQRSSIISPNSFMGQLLQFESQVLATSCAAEAASPSGPL  
 RERKTPATPTSQFVFSFPVSVGVHSAPSSLPYLHSPITTPSC

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001394

**ORF Size:** 1182 bp

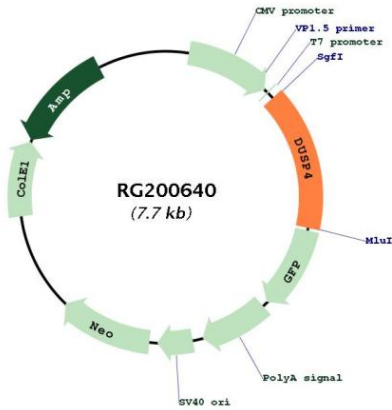
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001394.4</a>
<b>RefSeq Size:</b>	2498 bp
<b>RefSeq ORF:</b>	1185 bp
<b>Locus ID:</b>	1846
<b>UniProt ID:</b>	<a href="#">Q13115</a>
<b>Cytogenetics:</b>	8p12
<b>Domains:</b>	DSPc, RHOD, PTPc_motif
<b>Protein Families:</b>	Phosphatase
<b>Protein Pathways:</b>	MAPK signaling pathway
<b>Gene Summary:</b>	<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 RG200640