

## Product datasheet for **SC319809**

### **DUSP5 (NM\_004419) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	DUSP5 (NM_004419) Human Untagged Clone
Tag:	Tag Free
Symbol:	DUSP5
Synonyms:	DUSP; HVH3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

```
>OriGene sequence for NM_004419.3
AGAGAGAGAACGCGGAGTTGCGCCCGCTCGGGCGCGGGCTCCGTGCGGGCCGACGCC
CCGCGGGTTCGCCCTCCCGTGCCTCGCCCGGACACCCTGGCCGTGGACACCCTGGCCGT
GGGCACCCGCGGGGCGCGCGCGGGGCGCGCTGGCCGGCGGGCGCGGGCATGAAGGT
CACGTGCTCGACGGGCGCCAGCTGCGCAAGATGCTCCGAAGGAGGCGGGCGCGCTG
CGTGGTGTGACTGCCGGCCCTATCTGGCCTTCGCTGCCTCGAACGTGCGGGCTCGCT
CAACGTCAACCTCAACTCGGTGGTGTGCTGCGGGCGGGCCCGGGGCGCGGGTGTGCGCGC
CTACGTGCTGCCCGACGAGGCGCGCGCGCGCTCCTGCAAGGAGGCGGGCGGGCGCT
CGCGGGCGGTGGTGGTGTGACCAGGGCAGCCGCACTGGCAGAAGCTGCGAGAGGAGAG
CGCCGCGCGTGTGCTCCTCACCTCGCTACTCGCTTGCCTACCCGCGGGCCGCGGGTCTA
CTTCTCAAAGGGGATATGAGACTTTCTACTCGGAATATCCTGAGTGTGCGTGGATGT
AAAACCCATTTCAAGAGAAGATTGAGAGTGAGAGACCCTCATCAGCCAGTGTGGAAA
ACCAGTGGTAAATGTCAGCTACAGGCCAGCTTATGACCAGGTGGCCAGTTGAAATCCT
TCCCTTCTCTACCTTGAAGTGCCTACCATGCATCCAAGTGCAGTTTCTCGCCAACTT
GCACATCACAGCCCTGTGAATGTCTCCGACGGACCTCCGAGGCTGCATGACCACCT
ACACTACAAATGGATCCCTGTGGAAGACAGCCACACGGCTGACATTAGCTCCCACTTCA
AGAAGCAATAGACTTCATTGACTGTGTCAGGAAAAGGGAGGCAAGGTCCTGGTCCACTG
TGAGGCTGGGATCTCCGTTTACCCACCATCTGCATGGCTTACCTTATGAAGACCAAGCA
GTTCCGCTGAAGGAGGCCTTCGATTACATCAAGCAGAGGAGGAGCATGGTCTCGCCCAA
CTTTGGCTTATGGGCCAGCTCTGCAGTACGAATCTGAGATCTGCCCTCCACGCCCAA
CCCCAGCCTCCCTCTGCCAAGGGGAGGCAGCAGGCTTTCCTGATAGGCCATTTGCA
GACTGAGCCCTGACATGCAGGGTGCCTACTGCACATTCCTGCCTCGGTGTGGCACC
GGTGCTACCCACTCAACAGTCTCAGAGCTCAGCAGAAGCCCTGTGGCAACGGCCATC
CTGCTAAAACCTGGGATGGAGGAATCGGCCAGCCCAAGAGCAACTGTGATTTTTTTTTT
TAAGACTCATGGACATTTATACCTGTGAATACTGAAGACCTCATTCTGTCATGCTGCC
CCAGTGAGATAGTGAGTGGTACCAGGCTTGCAAATGAACTTCAGACGGACCTCAGGGTA
GGTTCTCGGGACTGAAGGAAGGCCAAGCCATTACGGGAGCACAGCATGTGCTGACTACTG
TACTTCCAGACCCTGCCCTTGGGACTGCCAGTCTTGCACCTCAGAGTTCGCCTTT
TCATTTCAAGCATAAGGCAATAAATACCTGCAGCAACGTGGGAGAAAGAAGTTGTGGAC
CAGGAGAAAAGGCAGTTATGAAGCCAATTCATTTGAAGGAAGCACAATTTCCACCTTAT
TTTTTGAACCTTGGCAGTTTCAATGTCTGTCTGTTGCTTCGGGCATGAAGCTGATCAC
CGTCTAGTTGGGAAAGTAACCCTACAGGTTTGTAGGGACATGATCAGCATCCTGATTTG
AACCTGAAATGTTGTGTAGACCCCTCTGGGTCCAATGAGGTAGTTGGTTGAAGTAGC
AAGATGTTGGCTTTTCTGGATTTTTTGGCATGGGTTCTTCACTGACCTTGGACTTTGG
CATGATTTAGTCATACTTGAACCTGTCTCATTCCACCTTCTCAGAGCAACTCTTCC
TTTGGGAAAAGAGTTCTCAGATCATAGACAAAAAAGTCATACCTTCGAGGTGGTAGCA
GTAGATTCAGGAGGAGAAGGGTACTTGTAGGTATCCTGGGTCAGTGGCGGTGCAAAC
GGTTTCTCAGCTGCCTGTCTTCTGTGTGCTTATGTCTTGTGACAATTTTTTCTC
CCTGCCCTGGAGTTGTCTTCAAGCTGTGGACTTCTGGGATTTGCAGATTTTGCACCT
GGTACTACTTTTTTTTTCTTTTTGTCTGTTAGTTATTTCCAGGGGAAAAGGCAATAAT
TTTCTAAGACCCGTGTGAATGTGAAGAAAAGCAGTATGTTACTGGTTGTTGTTGTTG
TTGTTTTTATAGTGTAATAAAAAATAGTGAAAGGAGAAAAGCAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA
```

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_004419

**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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_004419.3](#), [NP\\_004410.3](#)

**RefSeq Size:** 2545 bp

**RefSeq ORF:** 1155 bp

**Locus ID:** 1847

**UniProt ID:** [Q16690](#)

**Cytogenetics:** 10q25.2

**Domains:** DSPc, RHOD, PTPc\_motif

**Protein Families:** Phosphatase

**Protein Pathways:** MAPK signaling pathway

**Gene Summary:**

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, is expressed in a variety of tissues with the highest levels in pancreas and brain, and is localized in the nucleus. [provided by RefSeq, Jul 2008]