

## Product datasheet for **SC112460**

### **DUSP6 (NM\_022652) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DUSP6 (NM_022652) Human Untagged Clone
Tag:	Tag Free
Symbol:	DUSP6
Synonyms:	HH19; MKP3; PYST1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC112460 sequence for NM_022652 edited (data generated by NextGen Sequencing)

```
ATGATAGATACGCTCAGACCCGTGCCCTTCGCGTCGGAAATGGCGATCAGCAAGACGGTG
GCGTGGCTCAACGAGCAGCTGGAGCTGGGCAACGAGCGGCTGCTGCTGATGGACTGCCGG
CCGCAGGAGCTATACGAGTCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGC
ATCATGCTGCGGCGCCTGCAGAAGGGTAACCTGCCGGTGC GCGCGCTCTTACGCGCGGC
GAGGACCGGGACCGCTTACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAG
AGCAGCAGCGACTGGAACGAGAATACGGGCGGCGAGTCGTTGCTCGGGCTGCTGCTCAAG
AAGCTCAAGGACGAGGGTGCCGGGCGTTCTACCTGGAAGATGAAGCCCGGGCAAGAAC
TGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCT
TACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAA
AAATCCAACATATCCCCTAACTTCAACTTCATGGGTGAGCTGCTGGACTTCGAGAGGACG
CTGGGACTCAGCAGCCATGTGACAACAGGGTTCAGCACAGCAGCTGTATTTTACCACC
CCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCTACGTGA
```

Clone variation with respect to NM\_022652.2  
340 g=>t



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_022652 unedited  
 TTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGCGAGGCTGAGTCC  
 AAGAGATAGCAAATCGAGTCTTAAATAATCCGGGGAGAAAAGACGCCCGGGTAGATTTGAG  
 GTGCAGCCTTGGAGGGAGGGATTAGAAGCCGCTAGACTTTTTTCTCCCTCTCAGTAG  
 CACGGAGTCCGAATTAATTGGATTTCACTACTGGGGAGGAACAAAACTATCTGGGCAG  
 CTTCAATGAGAGAGATTCATTGACACTAAGAGCCAGCGGCTGCAGCTGGGTGCAGAGAGA  
 ACCCTCCGGCTTTACTTCTGTCTCGTCTGCCCAACCGCTAGCCTCGGCTTGGGTAAGGCG  
 AGGCGGAATTAACCCCGCTCCGAGAGCGCAGCTTCGCGCGGGTGCAGCTCGGCTATG  
 CCTGCCCGAGGGGCGTCTGGTAGGCACCCGCCCTCTCCCGCAGCTCGACCCCATGAT  
 AGATACGCTCAGACCCGTGCCCTTCGCGTCGGAATGGCGATCAGCAAGACGGTGGCGTG  
 GCTCAACGAGCAGCTGGAGCTGGGCAACGAGCGGCTGCTGATGGACTGCCGGCCGA  
 GGAGCTATACGAGTCGTCGACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCAT  
 GCTGCGGCGCCTGCAGAAGGGTAAACCTGCCGTGCGCGGCTCTTACGCGCGGCGAGGG  
 ACCGGACCGCTTACCCGGCGCTGTGGCACCGACACAGTGGTCTACGACGAGAGCAG  
 CAGCGACTGGAACGAGAATACGGNCGCGAGTCGTTGCTCGGGCTGCTGCTCAAAANCTC  
 AAGACGAGGCTGCCGGCCGCTCTACCTGAAGGTGGGCTCAGTAAGTCCAAGCGAGTCTCC  
 TGCATGCGAGACN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_022652 unedited  
 GCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTAGCCAAAATAGTTATT  
 TATTAATAATTTAAGGTTTTACATTCTTATAATAAATCCAGCTCTAACTTTACACCAC  
 GAACATAATGGAGAATTTAACTCTCCCTTCTTACAATCAAATGCATTTCTTTATCAA  
 TGGGTACCATGCTCACACACACACTCCAGTTTTATACAAATTTTTTAAAGGAAAG  
 AAACCAACCCAAAGTATTGCATTTGAGGTGACACTCCCTGAAGAATTTATACAGAGGTA  
 ATATACTGTTTAGCACAGCTGAAGGTTTTTTTATTCTTTCTTTTTTAAAGTGAGCCAT  
 GATTTGGTGTCTTTCCAGATTATCCCCTTTGCGACAACAAGCAAAAATATTTACAAA  
 GGTAAGGCATAGTCAAATACATAAAGAGAAAAATCATGAGGAAAAATACATGAAAAAGA  
 CTAAGACTTCGCCATAACAAGTCTTAGTGATAATAGTGTCCGTAAGATGTCATCAGA  
 ATTTGGTAAAGTCAAGCATGCTGCAAATATACCCCTTTGGATTAAGAAAGAGCACAACTT  
 CTTTTTTGTTNTGTTCTGTCTTAAGAAGTGGCATACTGCTCTTTCTCCCTTTGGATAAT  
 TTCTTTTAAACCCATCAAAGGAAAAACAACCCATTCAAACAACCTGTCAAGTATCCAA  
 GATCAAAATTTACCATAATCAATGGAGGATCCATTTTTTTTTTCCAACCGATCCCCAAATA  
 CAAACTAAATCTCCTTTTGCCTCCCTTTTCCAACTGGACTATCTCTTGTAAAACATT  
 TATTGCCGGTCAAATCCAAAGGAACCCCTTCAAAGCCCTAACAAACAACGGCTCCACCTT  
 CATTGGGGCCACCCTAGCCCTGGGAGCTCCAATCCCACCCTCCCGTTACCTCACCCG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_022652

**Insert Size:**

2930 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_022652.2](#), [NP\\_073143.2](#)

**RefSeq Size:** 2404 bp

**RefSeq ORF:** 708 bp

**Locus ID:** 1848

**UniProt ID:** [Q16828](#)

**Cytogenetics:** 12q21.33

**Domains:** DSPc, RHOD

**Protein Families:** Druggable Genome, 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 ERK2, is expressed in a variety of tissues with the highest levels in heart and pancreas, and unlike most other members of this family, is localized in the cytoplasm. Mutations in this gene have been associated with congenital hypogonadotropic hypogonadism. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jan 2014]

Transcript Variant: This variant (2) lacks an in-frame coding exon compared to variant 1. The resulting shorter isoform (b) lacks an internal protein segment compared to isoform a.