

## **Product datasheet for TR304875**

### OriGene Technologies, Inc.

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## **DUSP4 Human shRNA Plasmid Kit (Locus ID 1846)**

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** DUSP4 Human shRNA Plasmid Kit (Locus ID 1846)

**Locus ID:** 1846

Synonyms: HVH2; MKP-2; MKP2; TYP

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: DUSP4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

1846). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001394, NM 057158, NM 001394.1, NM 001394.2, NM 001394.3, NM 001394.4,

NM 001394.5, NM 001394.6, NM 057158.1, NM 057158.2, NM 057158.3, BC014565,

BC014565.2, BC002671, BC012900

UniProt ID: Q13115

**Summary:** The protein encoded by this gene is a member of the dual specificity protein phosphatase

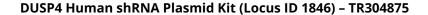
subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation 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, 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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







# Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).