

## **Product datasheet for TR313343**

## OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

## **DUSP9 Human shRNA Plasmid Kit (Locus ID 1852)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** DUSP9 Human shRNA Plasmid Kit (Locus ID 1852)

**Locus ID:** 1852

Synonyms: MKP-4; MKP4

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: DUSP9 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

1852). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001318503, NM 001395, NM 001395.1, NM 001395.2, NM 001395.3, BC060837,

BC060837.1, BC034936, BC042166, NM 001395.4

UniProt ID: 099956

**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 is 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 shows selectivity for members of the ERK family of MAP kinases and is localized to the cytoplasm and nucleus. Aberrant expression of this gene is associated with type 2 diabetes and cancer progression in several cell types. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan

2016]

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).