

Product datasheet for TL313345V

OriGene Technologies, Inc.

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DUSP7 Human shRNA Lentiviral Particle (Locus ID 1849)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: DUSP7 Human shRNA Lentiviral Particle (Locus ID 1849)

Locus ID: 1849

Synonyms: MKPX; PYST2

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: DUSP7 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 001947, NM 001947.2, NM 001947.3, BC104880, BC104880.1, BC019107, BC104882,

BC128064

UniProt ID: Q16829

Summary: Dual-specificity phosphatases (DUSPs) constitute a large heterogeneous subgroup of the type

I cysteine-based protein-tyrosine phosphatase superfamily. DUSPs are characterized by their ability to dephosphorylate both tyrosine and serine/threonine residues. DUSP7 belongs to a class of DUSPs, designated MKPs, that dephosphorylate MAPK (mitogen-activated protein kinase) proteins ERK (see MIM 601795), JNK (see MIM 601158), and p38 (see MIM 600289) with specificity distinct from that of individual MKP proteins. MKPs contain a highly conserved C-terminal catalytic domain and an N-terminal Cdc25 (see MIM 116947)-like (CH2) domain. MAPK activation cascades mediate various physiologic processes, including cellular

proliferation, apoptosis, differentiation, and stress responses (summary by Patterson et al.,

2009 [PubMed 19228121]).[supplied by OMIM, Dec 2009]

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).