

Product datasheet for TR513494

OriGene Technologies, Inc.

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Eif4h Mouse shRNA Plasmid (Locus ID 22384)

Product data:

Product Type: shRNA Plasmids

Product Name: Eif4h Mouse shRNA Plasmid (Locus ID 22384)

Locus ID: 22384

Synonyms: AU018978; D5Ertd355; D5Ertd355e; E430026L18Rik; Ef4h; eIF-4H; Eif4; Wbsc; Wbscr1; Wsc;

Wscr1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Eif4h - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

22384). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC014796, NM 033561, NM 033561.1, NM 033561.2, BC023227, BC023337</u>

UniProt ID: Q9WUK2

Summary: This gene encodes eukaryotic translation initiation factor 4H (eIF4H) that plays a critical role

in the process of protein synthesis. The encoded protein is an RNA-binding protein that, in concert with other translation initiation factors, helps unwind the 5' cap-proximal region of mRNA to prepare it for ribosomal attachment. Mice lacking the encoded protein displayed growth retardation with a significant reduction of body weight, a smaller brain volume and altered brain morphology. Behaviorally, mice lacking the encoded protein exhibit severe impairments of fear-related associative learning and memory formation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug

20151

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 custom shRNA service.





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).