

Product datasheet for TL500618V

OriGene Technologies, Inc.

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Ephb3 Mouse shRNA Lentiviral Particle (Locus ID 13845)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Ephb3 Mouse shRNA Lentiviral Particle (Locus ID 13845)

Locus ID: 13845

Synonyms: AW456895; Cek10; Etk2; HEK2; MDK5; Sek4; Tyro6

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Ephb3 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: <u>BC014822, BC053085, NM 010143, NM 010143.1, BC027805</u>

UniProt ID: P54754

Summary: Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B family ligands

residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as

forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Generally has an overlapping and redundant function with EPHB2. Like EPHB2, functions in axon guidance during development regulating for instance the neurons

forming the corpus callosum and the anterior commissure, 2 major interhemispheric

connections between the temporal lobes of the cerebral cortex. In addition to its role in axon

guidance plays also an important redundant role with other ephrin-B receptors in

development and maturation of dendritic spines and the formation of excitatory synapses. Controls other aspects of development through regulation of cell migration and positioning. This includes angiogenesis, palate development and thymic epithelium development for instance. Forward and reverse signaling through the EFNB2/EPHB3 complex also regulate migration and adhesion of cells that tubularize the urethra and septate the cloaca. Finally, plays an important role in intestinal epithelium differentiation segregating progenitor from

differentiated cells in the crypt.[UniProtKB/Swiss-Prot Function]

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>.





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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).