

Product datasheet for TL511001V

OriGene Technologies, Inc.

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Dtnbp1 Mouse shRNA Lentiviral Particle (Locus ID 94245)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Dtnbp1 Mouse shRNA Lentiviral Particle (Locus ID 94245)

Locus ID: 94245

Synonyms: 5430437B18Rik; AW048963; Bloc1s8; dysbindin; sdy

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Dtnbp1 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: <u>BC018350</u>, <u>BC058574</u>, <u>NM 025772</u>, <u>NM 025772.2</u>, <u>NM 025772.3</u>, <u>NM 025772.4</u>, <u>BC048682</u>

UniProt ID: Q91WZ8

Summary: Component of the BLOC-1 complex, a complex that is required for normal biogenesis of

lysosome-related organelles (LRO), such as platelet dense granules and melanosomes. In concert with the AP-3 complex, the BLOC-1 complex is required to target membrane protein cargos into vesicles assembled at cell bodies for delivery into neurites and nerve terminals. The BLOC-1 complex, in association with SNARE proteins, is also proposed to be involved in neurite extension. Associates with the BLOC-2 complex to facilitate the transport of TYRP1

independent of AP-3 function. Plays a role in synaptic vesicle trafficking and in

neurotransmitter release. Plays a role in the regulation of cell surface exposure of DRD2. May play a role in actin cytoskeleton reorganization and neurite outgrowth. May modulate MAPK8 phosphorylation. Appears to promote neuronal transmission and viability through regulating the expression of SNAP25 and SYN1, modulating PI3-kinase-Akt signaling and influencing glutamatergic release. Regulates the expression of SYN1 through binding to its promoter. Modulates prefrontal cortical activity via the dopamine/D2 pathway.[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>.







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).