

Product datasheet for TL511708V

OriGene Technologies, Inc.

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Adcy8 Mouse shRNA Lentiviral Particle (Locus ID 11514)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Adcy8 Mouse shRNA Lentiviral Particle (Locus ID 11514)

Locus ID: 11514

Synonyms: AC8; AW060868

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Adcy8 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: NM 001291903, NM 001331075, NM 009623, NM 009623.1, NM 009623.2, NM 001291903.1,

BC059010, BC094231, BC156810

UniProt ID: P97490

Summary: Catalyzes the formation of cAMP in response to calcium entry leadings to cAMP signaling

activation that affect processes suche as synaptic plasticity and insulin secretion (PubMed:10864938, PubMed:25403481, PubMed:10482244, PubMed:14585998,

PubMed:18448650). Plays a role in many brain functions, such as learning, memory, drug addiction, and anxiety modulation through regulation of synaptic plasticity by modulating long-term memory and long-term potentiation (LTP) through CREB transcription factor

activity modulation (PubMed:10482244, PubMed:14585998, PubMed:18448650, PubMed:10864938, PubMed:12441059, PubMed:20638449, PubMed:27234425, PubMed:18222416). Plays a central role in insulin secretion by controlling glucose

homeostasis through glucagon-like peptide 1 and glucose signaling pathway and maintains

insulin secretion through calcium-dependent PKA activation leading to vesicle pool

replenishment (PubMed:25403481). Also, allows PTGER3 to induce potentiation of PTGER4-mediated PLA2 secretion by switching from a negative to a positive regulation, during the IL1B induced-dedifferentiation of smooth muscle cells (By similarity).[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).