

Product datasheet for TG302916

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NOTCH1 Human shRNA Plasmid Kit (Locus ID 4851)

Product data:

Product Type: shRNA Plasmids

Product Name: NOTCH1 Human shRNA Plasmid Kit (Locus ID 4851)

Locus ID: 4851

Synonyms: AOS5; AOVD1; hN1; TAN1

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: NOTCH1 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 4851).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: <u>NM 017617, NM 017617.2, NM 017617.3, NM 017617.4, BC013208, BC039147, BC046127,</u>

BC049843, BC063597, NM 017617.5

UniProt ID: P46531

Summary: This gene encodes a member of the NOTCH family of proteins. Members of this Type I

transmembrane protein family share structural characteristics including an extracellular domain consisting of multiple epidermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple different domain types. Notch signaling is an evolutionarily conserved intercellular signaling pathway that regulates interactions between physically adjacent cells through binding of Notch family receptors to their cognate ligands. The encoded preproprotein is proteolytically processed in the trans-Golgi network to generate two polypeptide chains that heterodimerize to form the mature cell-surface receptor. This receptor plays a role in the development of numerous cell and tissue types. Mutations in this

gene are associated with aortic valve disease, Adams-Oliver syndrome, T-cell acute

lymphoblastic leukemia, chronic lymphocytic leukemia, and head and neck squamous cell

carcinoma. [provided by RefSeq, Jan 2016]

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).