

Product datasheet for TR312771

OriGene Technologies, Inc.

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GJA1 Human shRNA Plasmid Kit (Locus ID 2697)

Product data:

Product Type: shRNA Plasmids

Product Name: GJA1 Human shRNA Plasmid Kit (Locus ID 2697)

Locus ID: 2697

Synonyms: AVSD3; CMDR; CX43; EKVP; EKVP3; GJAL; HLHS1; HSS; ODDD; PPKCA

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: GJA1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

2697). 5µg purified plasmid DNA per construct

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

RefSeq: NM 000165, NM 000165.1, NM 000165.2, NM 000165.3, NM 000165.4, BC026329,

BC026329.1, NM 000165.5

UniProt ID: P17302

Summary: This gene is a member of the connexin gene family. The encoded protein is a component of

gap junctions, which are composed of arrays of intercellular channels that provide a route for the diffusion of low molecular weight materials from cell to cell. The encoded protein is the major protein of gap junctions in the heart that are thought to have a crucial role in the synchronized contraction of the heart and in embryonic development. A related intronless pseudogene has been mapped to chromosome 5. Mutations in this gene have been associated with oculodentodigital dysplasia, autosomal recessive craniometaphyseal

dysplasia and heart malformations. [provided by RefSeq, May 2014]

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).