

Product datasheet for TG500808

OriGene Technologies, Inc.

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Gja1 Mouse shRNA Plasmid (Locus ID 14609)

Product data:

Product Type: shRNA Plasmids

Product Name: Gja1 Mouse shRNA Plasmid (Locus ID 14609)

Locus ID: 14609

Synonyms: AU042049; AW546267; Cnx43; connexin43; Cx43; Cx43alpha1; Gja-1; Npm1

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Gja1 - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 14609).

5µg purified plasmid DNA per construct

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

RefSeq: <u>BC006894</u>, <u>BC055375</u>, <u>NM 010288</u>, <u>NM 010288.1</u>, <u>NM 010288.2</u>, <u>NM 010288.3</u>, <u>BC011324</u>

UniProt ID: P23242

Summary: Gap junction protein that acts as a regulator of bladder capacity. A gap junction consists of a

cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell. Negative regulator of bladder functional capacity: acts by enhancing intercellular electrical and chemical transmission, thus sensitizing bladder muscles to cholinergic neural stimuli and causing them to contract. May play a role in cell growth inhibition through the regulation of NOV expression and localization (PubMed:15181016). Plays an essential role in gap junction communication in the ventricles

(PubMed:26403541).[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).