

Product datasheet for TL314708

OriGene Technologies, Inc.

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Aquaporin 7 (AQP7) Human shRNA Plasmid Kit (Locus ID 364)

Product data:

Product Type: shRNA Plasmids

Product Name: Aquaporin 7 (AQP7) Human shRNA Plasmid Kit (Locus ID 364)

Locus ID: 364

Synonyms: AQP7L; AQPap; GLYCQTL

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: AQP7 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 364). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001170, NM 001318156, NM 001318157, NM 001318158, NR 134513, NR 134514,

NR 134515, NM 001170.1, NM 001170.2, BC062701, BC119672, BC119673, NM 001170.3

UniProt ID: <u>014520</u>

Summary: This gene encodes a member of the aquaporin family of water-selective membrane channels.

The encoded protein localizes to the plasma membrane and allows movement of water, glycerol and urea across cell membranes. This gene is highly expressed in the adipose tissue where the encoded protein facilitates efflux of glycerol. In the proximal straight tubules of kidney, the encoded protein is localized to the apical membrane and prevents excretion of glycerol into urine. The encoded protein is present in spermatids, as well as in the testicular and epididymal spermatozoa suggesting an important role in late spermatogenesis. Alternative splicing of this gene results in multiple transcript variants encoding different

isoforms. This gene is located adjacent to a related aquaporin gene on chromosome 9. Multiple pseudogenes of this gene have been identified. [provided by RefSeq, Dec 2015]

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 techsupport@origene.com.

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).