

Product datasheet for TL320378

OriGene Technologies, Inc.

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GUCY2D Human shRNA Plasmid Kit (Locus ID 3000)

Product data:

Product Type: shRNA Plasmids

Product Name: GUCY2D Human shRNA Plasmid Kit (Locus ID 3000)

Locus ID: 3000

Synonyms: CACD1; CG-E; CORD5; CORD6; CSNB1I; CYGD; GUC1A4; GUC2D; LCA; LCA1; RCD2; retGC;

RETGC-1; ROS-GC1; ROSGC

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: GUCY2D - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3000).

5µg purified plasmid DNA per construct

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

RefSeq: NM 000180, NM 000180.1, NM 000180.2, NM 000180.3, BC148421, BM931704

UniProt ID: Q02846

Summary: This gene encodes a retina-specific guanylate cyclase, which is a member of the membrane

guanylyl cyclase family. Like other membrane guanylyl cyclases, this enzyme has a hydrophobic amino-terminal signal sequence followed by a large extracellular domain, a single membrane spanning domain, a kinase homology domain, and a guanylyl cyclase catalytic domain. In contrast to other membrane guanylyl cyclases, this enzyme is not

activated by natriuretic peptides. Mutations in this gene result in Leber congenital amaurosis

and cone-rod dystrophy-6 diseases. [provided by RefSeq, Dec 2008]

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).