

Product datasheet for TL302613

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PCDHGA1 Human shRNA Plasmid Kit (Locus ID 56114)

Product data:

Product Type: shRNA Plasmids

Product Name: PCDHGA1 Human shRNA Plasmid Kit (Locus ID 56114)

Locus ID: 56114

Synonyms: PCDH-GAMMA-A1

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: PCDHGA1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

56114). 5µg purified plasmid DNA per construct

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

RefSeq: NM 018912, NM 031993, NM 031993.1, NM 018912.1, NM 018912.2, BC112082, BC112082.1,

BC112084

UniProt ID: Q9Y5H4

Summary: This gene is a member of the protocadherin gamma gene cluster, one of three related

clusters tandemly linked on chromosome five. These gene clusters have an immunoglobulin-like organization, suggesting that a novel mechanism may be involved in their regulation and expression. The gamma gene cluster includes 22 genes divided into 3 subfamilies. Subfamily

A contains 12 genes, subfamily B contains 7 genes and 2 pseudogenes, and the more distantly related subfamily C contains 3 genes. The tandem array of 22 large, variable region

exons are followed by a constant region, containing 3 exons shared by all genes in the cluster.

Each variable region exon encodes the extracellular region, which includes 6 cadherin ectodomains and a transmembrane region. The constant region exons encode the common

cytoplasmic region. These neural cadherin-like cell adhesion proteins most likely play a critical

role in the establishment and function of specific cell-cell connections in the brain.

Alternative splicing has been described for the gamma cluster genes. [provided by RefSeq, Jul

2008]





PCDHGA1 Human shRNA Plasmid Kit (Locus ID 56114) - TL302613

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 custom shRNA service.

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).