

Product datasheet for **TR302625**

Protocadherin beta 12 (PCDHB12) Human shRNA Plasmid Kit (Locus ID 56124)

Product data:

Product Type:	shRNA Plasmids
Locus ID:	56124
Synonyms:	PCDH-BETA12
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PCDHB12 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 56124). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM_018932</u> , <u>NM_018932.1</u> , <u>NM_018932.2</u> , <u>NM_018932.3</u> , <u>BC045637</u> , <u>BC045637.1</u> , <u>NM_018932.4</u>
UniProt ID:	<u>Q9Y5F1</u>
Summary:	This gene is a member of the protocadherin beta gene cluster, one of three related gene clusters tandemly linked on chromosome five. The gene clusters demonstrate an unusual genomic organization similar to that of B-cell and T-cell receptor gene clusters. The beta cluster contains 16 genes and 3 pseudogenes, each encoding 6 extracellular cadherin domains and a cytoplasmic tail that deviates from others in the cadherin superfamily. The extracellular domains interact in a homophilic manner to specify differential cell-cell connections. Unlike the alpha and gamma clusters, the transcripts from these genes are made up of only one large exon, not sharing common 3' exons as expected. These neural cadherin-like cell adhesion proteins are integral plasma membrane proteins. Their specific functions are unknown but they most likely play a critical role in the establishment and function of specific cell-cell neural connections. [provided by RefSeq, Jul 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 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).