

## Product datasheet for TR310491

## PEX5 Human shRNA Plasmid Kit (Locus ID 5830)

## **Product data:**

## 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

Product Type:	shRNA Plasmids
Product Name:	PEX5 Human shRNA Plasmid Kit (Locus ID 5830)
Locus ID:	5830
Synonyms:	PBD2A; PBD2B; PTS1-BP; PTS1R; PXR1; RCDP5
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PEX5 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5830). 5μg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM 000319, NM 001131023, NM 001131024, NM 001131025, NM 001131026, NM 001300789, NM 001351124, NM 001351126, NM 001351127, NM 001351128, NM 001351130, NM 001351131, NM 001351132, NM 001351133, NM 001351134, NM 001351135, NM 001351136, NM 001351137, NM 001351138, NM 001351139, NM 001351140, NM 000319.1, NM 000319.2, NM 000319.3, NM 000319.4, NM 001131024.1, NM 001131025.1, NM 001131026.1, NM 001131023.1, NM 001300789.1, BC010621, BC010621.2, NM 001131024.2, NM 001131025.2, NM 001131026.2, NM 001131023.2, NM 000319.5
UniProt ID:	<u>P50542</u>



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

	PEX5 Human shRNA Plasmid Kit (Locus ID 5830) – TR310491
Summary:	The product of this gene binds to the C-terminal PTS1-type tripeptide peroxisomal targeting signal (SKL-type) and plays an essential role in peroxisomal protein import. Peroxins (PEXs) are proteins that are essential for the assembly of functional peroxisomes. The peroxisome biogenesis disorders (PBDs) are a group of genetically heterogeneous autosomal recessive, lethal diseases characterized by multiple defects in peroxisome function. The peroxisomal biogenesis disorders are a heterogeneous group with at least 14 complementation groups and with more than 1 phenotype being observed in cases falling into particular complementation groups. Although the clinical features of PBD patients vary, cells from all PBD patients exhibit a defect in the import of one or more classes of peroxisomal matrix proteins into the organelle. Defects in this gene are a cause of neonatal adrenoleukodystrophy (NALD), a cause of Zellweger syndrome (ZWS) as well as may be a cause of infantile Refsum disease (IRD). Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Oct 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

**%**// \_

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

preferred).