

## **Product datasheet for TG314098**

## 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

## PD-L1 (CD274) Human shRNA Plasmid Kit (Locus ID 29126)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: PD-L1 (CD274) Human shRNA Plasmid Kit (Locus ID 29126)

**Locus ID:** 29126

Synonyms: B7-H; B7H1; hPD-L1; PDCD1L1; PDCD1LG1; PDL1

**Vector:** pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: CD274 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 29126).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 001267706, NM 001314029, NM 014143, NR 052005, NM 014143.1, NM 014143.2,

NM 014143.3, NM 001267706.1, BC069381, BC074984, BC113734, BC113736, NM 014143.4

UniProt ID: Q9NZQ7

Summary: This gene encodes an immune inhibitory receptor ligand that is expressed by hematopoietic

and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The encoded protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation. Expression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq,

Sep 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 <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).