

Product datasheet for **KN302893**

PD-L1 (Cd274) Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)
Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA: GFP-puro
Symbol: PD-L1
Locus ID: 60533
Components: **KN302893G1**, PD-L1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCCTGCTGCTCACTTGCTACG
KN302893G2, PD-L1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TAGAACCCACTGAAAAGATT
KN302893D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG ATC

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GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_021893](#)

UniProt ID:

[Q9EP73](#)

Synonyms:

A530045L16Rik; B7h1; Pdcd11i; Pdcd1lg1; Pdl1

Summary:

The protein encoded by this gene is 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. Mice deficient for this gene display a variety of phenotypes including decreased allogeneic fetal survival rates and severe experimental autoimmune encephalomyelitis. [provided by RefSeq, Sep 2015]

Product images:

