

Product datasheet for **KN210364**

PD1 (PDCD1) Human 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:	PD1
Locus ID:	5133
Components:	<p>KN210364G1, PD1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTAGCACCGCCCAGACGAC</p> <p>KN210364G2, PD1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGTCTGGGCGGTGCTACAAC</p> <p>KN210364D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

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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TCAGAGCAGA TTGTA CTGAG AGTGCACCAT ATGCGGTGTG AAATACCGCA CAGATGCGTA AGGAGAAAAT
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CCCGCTTAT CAGAAGCCAG ACATTA

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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_005018](#)

UniProt ID:

[Q15116](#)

Synonyms:

CD279; hPD-1; hPD-I; hSLE1; PD-1; PD1; SLEB2

Summary:

Programmed cell death protein 1 (PDCD1) is an immune-inhibitory receptor expressed in activated T cells; it is involved in the regulation of T-cell functions, including those of effector CD8+ T cells. In addition, this protein can also promote the differentiation of CD4+ T cells into T regulatory cells. PDCD1 is expressed in many types of tumors including melanomas, and has demonstrated to play a role in anti-tumor immunity. Moreover, this protein has been shown to be involved in safeguarding against autoimmunity, however, it can also contribute to the inhibition of effective anti-tumor and anti-microbial immunity. [provided by RefSeq, Aug 2020]

Product images:

