

Product datasheet for **KN209328**

PPM1D 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:	PPM1D
Locus ID:	8493
Components:	<p>KN209328G1, PPM1D gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGTTGTGGAGCCCCGAACCGA</p> <p>KN209328G2, PPM1D gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGAGCGTCTTCTCCGACCA</p> <p>KN209328D, 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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AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 ATAGTTTTCG CAACGTTGTT GCCATTGCTA CAGGCATCGT GGTGTCACGC TCGCTGTTTGT GTATGGCTTC
 ATTCAGCTCC GGTCCCAAC GATC

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_003620](#)

UniProt ID:

[O15297](#)

Synonyms:

PP2C-DELTA; WIP1

Summary:

The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. The expression of this gene is induced in a p53-dependent manner in response to various environmental stresses. While being induced by tumor suppressor protein TP53/p53, this phosphatase negatively regulates the activity of p38 MAP kinase, MAPK/p38, through which it reduces the phosphorylation of p53, and in turn suppresses p53-mediated transcription and apoptosis. This phosphatase thus mediates a feedback regulation of p38-p53 signaling that contributes to growth inhibition and the suppression of stress induced apoptosis. This gene is located in a chromosomal region known to be amplified in breast cancer. The amplification of this gene has been detected in both breast cancer cell line and primary breast tumors, which suggests a role of this gene in cancer development. [provided by RefSeq, Jul 2008]

Product images:

