

Product datasheet for **KN214198**

PTPRU 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: PTPRU
Locus ID: 10076
Components: **KN214198G1**, PTPRU gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAGTGCCAGCACGAGCGCCT
KN214198G2, PTPRU gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGTCTCCGGCGCGCAGAGC
KN214198D, 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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 AGTTTGCGCA ACGTTGTTGC CATTGCTACA GGCATCGTGG TGTCACGCTC GTCGTTTGGT ATGGCTTCAT
 TCAGCTCCGG TTCCAACGA TC

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_001195001](#), [NM_005704](#), [NM_133177](#), [NM_133178](#)

UniProt ID:

[Q92729](#)

Synonyms:

FMI; hPTP-J; PCP-2; PTP; PTP-J; PTP-PI; PTP-RO; PTPPSI; PTPRO; PTPU2; R-PTP-PSI; R-PTP-U

Summary:

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region, a single transmembrane region, and two tandem intracellular catalytic domains, and thus represents a receptor-type PTP. The extracellular region contains a meprin-A5 antigen-PTP (MAM) domain, Ig-like and fibronectin type III-like repeats. This PTP was thought to play roles in cell-cell recognition and adhesion. Studies of the similar gene in mice suggested the role of this PTP in early neural development. The expression of this gene was reported to be regulated by phorbol myristate acetate (PMA) or calcium ionophore in Jurkat T lymphoma cells. Alternatively spliced transcript variants have been reported. [provided by RefSeq, Aug 2010]

Product images:

