

## Product datasheet for KN205220LP

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## **DUSP1 Human Gene Knockout Kit (CRISPR)**

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

**Donor DNA:** Luciferase-Puro

Symbol: DUSP1 Locus ID: 1843

**Components:** KN205220G1, DUSP1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN205220G2**, DUSP1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN205220LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

**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: <u>NM 004417</u>

UniProt ID: P28562

Synonyms: CL100; HVH1; MKP-1; MKP1; PTPN10

**Summary:** The protein encoded by this gene is a phosphatase with dual specificity for tyrosine and

threonine. The encoded protein can dephosphorylate MAP kinase MAPK1/ERK2, which results in its involvement in several cellular processes. This protein appears to play an important role in the human cellular response to environmental stress as well as in the negative regulation of cellular proliferation. Finally, the encoded protein can make some solid tumors resistant to both chemotherapy and radiotherapy, making it a target for cancer therapy. [provided by

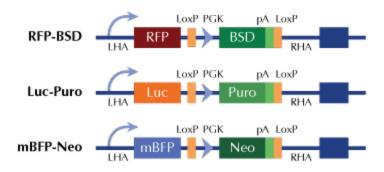
RefSeq, Aug 2017]





# **Product images:**

### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter