

Product datasheet for KN208051LP

OriGene Technologies, Inc.

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USP20 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: USP20 Locus ID: 10868

Components: KN208051G1, USP20 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN208051G2, USP20 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN208051LPD, 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 001008563</u>, <u>NM 001110303</u>, <u>NM 006676</u>

UniProt ID: Q9Y2K6

Synonyms: hVDU2; LSFR3A; VDU2

Summary: This gene encodes a ubiquitin specific processing protease that was first identified as a

substrate of the VHL (von Hippel-Lindau disease) protein E3 ubiquitin ligase complex. In addition to being ubiquitinated by the VHL-E3 ligase complex, this enzyme deubiquitinates hypoxia-inducible factor (HIF)-1 alpha and thereby causes increased expression of HIF-1alpha targeted genes which play a role in angiogenesis, glucose metabolism, cell proliferation and metastasis. The enzyme encoded by this gene also regulates G-protein coupled receptor signaling by mediating the deubiquitination of beta-2 adrenergic receptor (ADRB2). This enzyme is a ubiquitously expressed thiolester hydrolase. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Jan 2013]



Product images:

Donor Vector Edited Chromosome



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