

Product datasheet for KN208051RB

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USP20 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA:RFP-BSDSymbol:USP20Locus 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)

KN208051RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

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