

# **Product datasheet for KN215720LP**

#### 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436

OriGene Technologies, Inc.

Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

## **ZNF451 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: ZNF451 Locus ID: 26036

**Components:** KN215720G1, ZNF451 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN215720G2**, ZNF451 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN215720LPD, 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 001031623</u>, <u>NM 001257273</u>, <u>NM 015555</u>

UniProt ID: Q9Y4E5

Synonyms: COASTER; dJ417I1.1

**Summary:** E3 SUMO-protein ligase; has a preference for SUMO2 and SUMO3 and facilitates

UBE2I/UBC9-mediated sumoylation of target proteins (PubMed:26524493,

PubMed:26524494). Plays a role in protein SUMO2 modification in response to stress caused by DNA damage and by proteasome inhibitors (in vitro). Required for MCM4 sumoylation (By similarity). Has no activity with SUMO1 (BubMed:26524493). Preferentially transfers an

similarity). Has no activity with SUMO1 (PubMed:26524493). Preferentially transfers an additional SUMO2 chain onto the SUMO2 consensus site 'Lys-11' (PubMed:26524493). Negatively regulates transcriptional activation mediated by the SMAD4 complex in response

to TGF-beta signaling. Inhibits EP300-mediated acetylation of histone H3 at 'Lys-9' (PubMed:24324267). Plays a role in regulating the transcription of AR targets

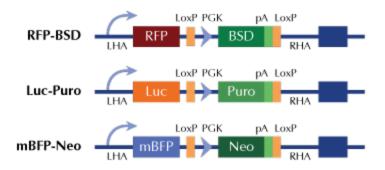
(PubMed:18656483).[UniProtKB/Swiss-Prot Function]





# **Product images:**

### Donor Vector Edited Chromosome



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