

Product datasheet for KN219269LP

OriGene Technologies, Inc.

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GRAMD1B 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: GRAMD1B

Locus ID: 57476

Components: KN219269G1, GRAMD1B gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN219269G2, GRAMD1B gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN219269LPD, 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: NM 001286563, NM 001286564, NM 001330396, NM 020716, NM 001354837,

NM 001367420, NM 001367421, NM 001367418, NM 001367419

UniProt ID: Q3KR37

Summary: Cholesterol transporter that mediates non-vesicular transport of cholesterol from the plasma

membrane (PM) to the endoplasmic reticulum (ER) (By similarity). Contains unique domains for binding cholesterol and the PM, thereby serving as a molecular bridge for the transfer of

cholesterol from the PM to the ER (By similarity). Plays a crucial role in cholesterol

homeostasis in the adrenal gland and has the unique ability to localize to the PM based on the level of membrane cholesterol (By similarity). In lipid-poor conditions localizes to the ER membrane and in response to excess cholesterol in the PM is recruited to the endoplasmic reticulum-plasma membrane contact sites (EPCS) which is mediated by the GRAM domain (By similarity). At the EPCS, the sterol-binding VASt/ASTER domain binds to the cholesterol in the

PM and facilitates its transfer from the PM to ER (By similarity).[UniProtKB/Swiss-Prot

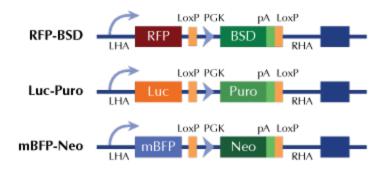
Function]





Product images:

Donor Vector Edited Chromosome



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