

Product datasheet for KN319455LP

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Wnt5a Mouse 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: Wnt5a Locus ID: 22418

Components: KN319455G1, Wnt5a gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN319455G2, Wnt5a gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN319455LPD, 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 001256224</u>, <u>NM 009524</u>

UniProt ID: P22725

Synonyms: 8030457G12Rik; Wnt-5a

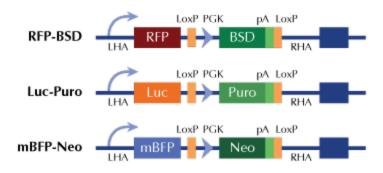


Summary:

Ligand for members of the frizzled family of seven transmembrane receptors (PubMed:17117926). Can activate or inhibit canonical Wnt signaling, depending on receptor context (PubMed:16602827). In the presence of FZD4, activates beta-catenin signaling. In the presence of ROR2, inhibits the canonical Wnt pathway by promoting beta-catenin degradation through a GSK3-independent pathway which involves down-regulation of beta-catenin-induced reporter gene expression (PubMed:16602827). Suppression of the canonical pathway allows chondrogenesis to occur and inhibits tumor formation. Stimulates cell migration (PubMed:17117926). Decreases proliferation, migration, invasiveness and clonogenicity of carcinoma cells and may act as a tumor suppressor. Mediates motility of melanoma cells (By similarity). Required during embryogenesis for extension of the primary anterior-posterior axis and for outgrowth of limbs and the genital tubercle (PubMed:10021340). Inhibits type II collagen expression in chondrocytes (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:

Donor Vector Edited Chromosome



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