

## Product datasheet for **KN319455**

### Wnt5a Mouse Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Wnt5a
Locus ID:	22418
Components:	<p><b>KN319455G1</b>, Wnt5a gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGTTAACTTTGAAAAGGGG</p> <p><b>KN319455G2</b>, Wnt5a gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCAGTTAACTTTGAAAAGGG</p> <p><b>KN319455D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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CGCTCTTCCG CTCCTCGCT CACTGACTCG CTGCGCTCGG TCGTTCGGCT GCGGCGAGCG GTATCAGCTC
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CCAGAAAAG GCCAGGAACC GTAAAAAGGC CGCGTTGCTG GCGTTTTTCC ATAGGCTCCG CCCCCCTGAC
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ACAGGCATCG TGGTGTACG CTCGCTGTTT GGTATGGCTT CATTACGCTC CGTTCCCAA CGATC

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**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\\_001256224](#), [NM\\_009524](#)

**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:**
