

Product datasheet for KN310963LP

Ngf Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control Format:

Donor DNA: Luciferase-Puro

Ngf Symbol:

Locus ID: 18049

KN310963G1, Ngf gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN310963G2, Ngf gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN310963LPD, 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 001112698, NM 013609

UniProt ID: P01139 Synonyms: Ngfb

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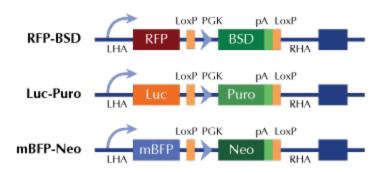


Summary:

Nerve growth factor is important for the development and maintenance of the sympathetic and sensory nervous systems (PubMed:20036257). Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades to regulate neuronal proliferation, differentiation and survival (PubMed:22649032). The immature NGF precursor (proNGF) functions as ligand for the heterodimeric receptor formed by SORCS2 and NGFR, and activates cellular signaling cascades that lead to inactivation of RAC1 and/or RAC2, reorganization of the actin cytoskeleton and neuronal growth cone collapse (PubMed:22155786). In contrast to mature NGF, the precursor form (proNGF) promotes neuronal apoptosis (in vitro) (PubMed:20036257). Inhibits metalloproteinase-dependent proteolysis of platelet glycoprotein VI (By similarity). Binds lysophosphatidylinositol and lysophosphatidylserine between the two chains of the homodimer (PubMed:22649032, PubMed:26144237). The lipid-bound form promotes histamine relase from mast cells, contrary to the lipid-free form (PubMed:22649032).[UniProtKB/Swiss-Prot Function]

Product images:

Donor Vector Edited Chromosome



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