

# Product datasheet for KN310963RB

## Ngf Mouse Gene Knockout Kit (CRISPR)

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

**Donor DNA:** 

Symbol: Ngf

18049 Locus ID:

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

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

KN310963RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

NM 001112698, NM 013609 RefSeq:

**UniProt ID:** P01139 Synonyms: Ngfb

**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]



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## **Product images:**

#### Donor Vector Edited Chromosome



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