

## Product datasheet for **KN204866**

### GDNF Receptor alpha 1 (GFRA1) Human 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:** GDNF Receptor alpha 1  
**Locus ID:** 2674  
**Components:** **KN204866G1**, GDNF Receptor alpha 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCCTCGACTTACCCAAGAG  
**KN204866G2**, GDNF Receptor alpha 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGACCCTAGGAAAGACTCAG  
**KN204866D**, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

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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 TTCAGCTCCG GTTCCCAACG ATC

**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\\_001145453](#), [NM\\_005264](#), [NM\\_145793](#), [NM\\_001348096](#), [NM\\_001348097](#), [NM\\_001348098](#), [NM\\_001348099](#)

**UniProt ID:**

[P56159](#)

**Synonyms:**

GDNFR; GDNFRA; GFR-ALPHA-1; RET1L; RETL1; TRNR1

**Summary:**

This gene encodes a member of the glial cell line-derived neurotrophic factor receptor (GDNFR) family of proteins. The encoded preproprotein is proteolytically processed to generate the mature receptor. Glial cell line-derived neurotrophic factor (GDNF) and neurturin (NTN) are two structurally related, potent neurotrophic factors that play key roles in the control of neuron survival and differentiation. This receptor is a glycosylphosphatidylinositol (GPI)-linked cell surface receptor for both GDNF and NTN, and mediates activation of the RET tyrosine kinase receptor. This gene is a candidate gene for Hirschsprung disease. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:

