

## Product datasheet for KN204499BN

#### OriGene Technologies, Inc.

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### beta 2 Adrenergic Receptor (ADRB2) Human Gene Knockout Kit (CRISPR)

**Product data:** 

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

**Format:** 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

**Donor DNA:** mBFP-Neo

**Symbol:** beta 2 Adrenergic Receptor

Locus ID: 154

**Components:** KN204499G1, beta 2 Adrenergic Receptor gRNA vector 1 in pCas-Guide CRISPR vector

(GE100002)

KN204499G2, beta 2 Adrenergic Receptor gRNA vector 2 in pCas-Guide CRISPR vector

(GE100002)

KN204499BND, donor DNA containing left and right homologous arms and mBFP-Neo

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 000024</u>

UniProt ID: P07550

**Synonyms:** ADRB2R; ADRBR; B2AR; BETA2AR

**Summary:** This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled

type 2 diabetes and cardiovascular disease. [provided by RefSeq, Oct 2019]

receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an adenylyl cyclase, cAMP-dependent kinase, and the counterbalancing phosphatase, PP2A. The assembly of the signaling complex provides a mechanism that ensures specific and rapid signaling by this G protein-coupled receptor. This receptor is also a transcription regulator of the alpha-synuclein gene, and together, both genes are believed to be associated with risk of Parkinson's Disease. This gene is intronless. Different polymorphic forms, point mutations, and/or downregulation of this gene are associated with nocturnal asthma, obesity,



# **Product images:**

#### Donor Vector Edited Chromosome



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