

Product datasheet for **KN204499**

beta 2 Adrenergic Receptor (ADRB2) 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:	beta 2 Adrenergic Receptor
Locus ID:	154
Components:	<p>KN204499G1, beta 2 Adrenergic Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGACGTCGTGGTCCGGCGCA</p> <p>KN204499G2, beta 2 Adrenergic Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAAGAAGGCGCTGCCGTTCC</p> <p>KN204499D, 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 CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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TGCGCAACGT TGTGCCATT GCTACAGGCA TCGTGGTGTG ACGCTCGTCG TTTGGTATGG CTTCATTCAG
CTCCGGTTCC CAACGATC

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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_000024](#)

UniProt ID:

[P07550](#)

Synonyms:

ADRB2R; ADRBR; B2AR; BAR; BETA2AR

Summary:

This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled 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, type 2 diabetes and cardiovascular disease. [provided by RefSeq, Oct 2019]

Product images:

