

Product datasheet for KN207623RB

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CHRFAM7A Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

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

Donor DNA: RFP-BSD **Symbol:** CHRFAM7A

Locus ID: 89832

Components: KN207623G1, CHRFAM7A gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN207623G2, CHRFAM7A gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN207623RBD**, donor DNA containing left and right homologous arms and RFP-BSD

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 139320</u>, <u>NM 148911</u>

UniProt ID: <u>P36544</u>

Synonyms: CHRNA7; CHRNA7-DR1; D-10

Summary: The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated

ion channels that mediate fast signal transmission at synapses. The family member CHRNA7, which is located on chromosome 15 in a region associated with several neuropsychiatric disorders, is partially duplicated and forms a hybrid with a novel gene from the family with sequence similarity 7 (FAM7A). Alternative splicing has been observed, and two variants exist, for this hybrid gene. The N-terminally truncated products predicted by the largest open reading frames for each variant would lack the majority of the neurotransmitter-gated ion-channel ligand binding domain but retain the transmembrane region that forms the ion channel. Although current evidence supports transcription of this hybrid gene, translation of the nicotinic acetylcholine receptor-like protein-encoding open reading frames has not been

confirmed. [provided by RefSeq, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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