

Product datasheet for KN212355RB

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Dopamine beta Hydroxylase (DBH) 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: Dopamine beta Hydroxylase

Locus ID: 1621

Components: KN212355G1, Dopamine beta Hydroxylase gRNA vector 1 in pCas-Guide CRISPR vector

(GE100002)

KN212355G2, Dopamine beta Hydroxylase gRNA vector 2 in pCas-Guide CRISPR vector

(GE100002)

KN212355RBD, 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 000787</u>

UniProt ID: P09172
Synonyms: DBM

Summary: The protein encoded by this gene is an oxidoreductase belonging to the copper type II,

ascorbate-dependent monooxygenase family. The encoded protein, expressed in neuroscretory vesicles and chromaffin granules of the adrenal medulla, catalyzes the conversion of dopamine to norepinephrine, which functions as both a hormone and as the main neurotransmitter of the sympathetic nervous system. The enzyme encoded by this gene exists exists in both soluble and membrane-bound forms, depending on the absence or presence, respectively, of a signal peptide. Mutations in this gene cause dopamine betahydroxylate deficiency in human patients, characterized by deficits in autonomic and cardiovascular function, including hypotension and ptosis. Polymorphisms in this gene may play a role in a variety of psychiatric disorders. [provided by RefSeq, Aug 2017]





Product images:

Donor Vector Edited Chromosome



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