

## Product datasheet for **KN212355**

### Dopamine beta Hydroxylase (DBH) 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:	Dopamine beta Hydroxylase
Locus ID:	1621
Components:	<p><b>KN212355G1</b>, Dopamine beta Hydroxylase gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGGCTGGCCAGCGACTGA</p> <p><b>KN212355G2</b>, Dopamine beta Hydroxylase gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CACTGCTGTGCTGTACATGA</p> <p><b>KN212355D</b>, 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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**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\\_000787](#)

**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 neurosecretory 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 in both soluble and membrane-bound forms, depending on the absence or presence, respectively, of a signal peptide. Mutations in this gene cause dopamine beta-hydroxylase 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:

