

Product datasheet for **KN310718**

Nampt Mouse 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:	Nampt
Locus ID:	59027
Components:	<p>KN310718G1, Nampt gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTCCACCTTGACGAGTCGG</p> <p>KN310718G2, Nampt gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TACAAGGTGGAGTTGCGATG</p> <p>KN310718D, 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_021524](#)

UniProt ID:

[Q99KQ4](#)

Synonyms:

1110035O14Rik; AI314458; AI480535; NAmPRTase; Pbef; Pbef1; Visfatin

Summary:

The secreted form behaves both as a cytokine with immunomodulating properties and an adipokine with anti-diabetic properties, it has no enzymatic activity, partly because of lack of activation by ATP, which has a low level in extracellular space and plasma (By similarity). Catalyzes the condensation of nicotinamide with 5-phosphoribosyl-1-pyrophosphate to yield nicotinamide mononucleotide, an intermediate in the biosynthesis of NAD. It is the rate limiting component in the mammalian NAD biosynthesis pathway. Plays a role in the modulation of circadian clock function. NAMPT-dependent oscillatory production of NAD regulates oscillation of clock target gene expression by releasing the core clock component: CLOCK-ARNTL/BMAL1 heterodimer from NAD-dependent SIRT1-mediated suppression. [UniProtKB/Swiss-Prot Function]

Product images:

