

Product datasheet for KN203468RB

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com

https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CAMKK2 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: CAMKK2 Locus ID: 10645

Components: KN203468G1, CAMKK2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN203468G2, CAMKK2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN203468RBD**, donor DNA containing left and right homologous arms and RFP-BSD

KN203408KBD, donor DNA containing left and right homologous arm

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: NM 001270485, NM 001270486, NM 006549, NM 153499, NM 153500, NM 172214,

NM 172215, NM 172216, NM 172226

UniProt ID: Q96RR4

Synonyms: CAMKK; CAMKKB

Summary: The product of this gene belongs to the Serine/Threonine protein kinase family, and to the

Ca(2+)/calmodulin-dependent protein kinase subfamily. The major isoform of this gene plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade by phosphorylating the downstream kinases CaMK1 and CaMK4. Protein products of this gene also phosphorylate AMP-activated protein kinase (AMPK). This gene has its strongest expression in the brain and influences signalling cascades involved with learning and memory, neuronal differentiation and migration, neurite outgrowth, and synapse formation. Alternative splicing results in multiple transcript variants encoding distinct isoforms. The identified isoforms differ in their ability to undergo autophosphorylation and to phosphorylate downstream kinases. [provided

by RefSeq, Jul 2012]





Product images:

Donor Vector Edited Chromosome



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