

Product datasheet for KN205437BN

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

OriGene Technologies, Inc.

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

CAMK2G Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo Symbol: CAMK2G

Locus ID: 818

Components: KN205437G1, CAMK2G gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN205437G2, CAMK2G gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN205437BND, donor DNA containing left and right homologous arms and mBFP-Neo

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 001204492, NM 001222, NM 001320898, NM 172169, NM 172170, NM 172171,

NM 172172, NM 172173, NM 001367547, NM 001367516, NM 001367518, NM 001367525,

NM 001367526, NM 001367529, NM 001367534, NM 001367537, NM 001367539,

NM 001367540, NM 001367542, NM 001367544, NM 001367545, NR 160042, NR 160045,

NR 160263, NM 001367514, NM 001367517, NM 001367519, NM 001367520, NM 001367521, NM 001367522, NM 001367523, NM 001367524, NM 001367527, NM 001367528, NM 001367530, NM 001367531, NM 001367532, NM 001367533, NM 001367535, NM 001367536, NM 001367538, NM 001367541, NM 001367543,

NM 001367546, NM 001367548, NR 160040, NR 160041, NR 160044, NR 160046, NR 160047

UniProt ID: 013555

Synonyms: CAMK; CAMK-II; CAMKG



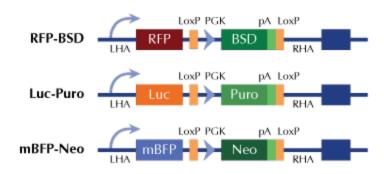


Summary:

The product of this gene is one of the four subunits of an enzyme which belongs to the serine/threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells the enzyme is composed of four different chains: alpha, beta, gamma, and delta. The product of this gene is a gamma chain. Many alternatively spliced transcripts encoding different isoforms have been described but the full-length nature of all the variants has not been determined.[provided by RefSeq, Mar 2011]

Product images:

Donor Vector Edited Chromosome



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