

Product datasheet for **KN205437**

CAMK2G 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: CAMK2G
Locus ID: 818
Components: **KN205437G1**, CAMK2G gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTCGAAGAGCTGGTAGTCGT
KN205437G2, CAMK2G gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAAGCCGCATAGCTCCCGG
KN205437D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

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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TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGCAAC AATTAATAGA
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AACACTGCGG CCAACTTACT TCTGACAACG ATCGGAGGAC CGAAGGAGCT AACCGCTTTT TTGCACAACA
TGGGGGATCA TGTAACCTCGC CTT

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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_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:

[Q13555](#)

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:
