

Product datasheet for **KN309828**

Cgas 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:	Cgas
Locus ID:	214763
Components:	<p>KN309828G1, Cgas gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGATCCGCGTAGAAGGACGA</p> <p>KN309828G2, Cgas gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCGGACGGCTTCTTAGCGCG</p> <p>KN309828D, 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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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG ATC

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_173386](#), [NR_125721](#)

UniProt ID:

[Q8C6L5](#)

Synonyms:

cGAS; E330016A19Rik

Summary:

The protein encoded by this gene is a DNA binding cytosolic protein that catalyzes the synthesis of cyclic guanosine monophosphate-adenosine monophosphate (cGAMP) after sensing the presence of DNA in the cytoplasm. cGAMP binds another protein, Stimulator of interferon genes (STING), leading to the induction of interferons, and a host immune response. Reduced expression of this gene inhibits interferon induction in the presence of some viral infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]

Product images:

