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Product datasheet for KN216248

Caspase 8 (CASP8) 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: Caspase 8

Locus ID: 841

Components: **KN216248G1**, Caspase 8 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCTGCTGAGCACGTGGAGTT
KN216248G2, Caspase 8 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTAACTCCACGTGCTCAGCA
KN216248D, 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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TACAGGCATC GTGGTGTCAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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_001080124, NM_001080125, NM_001228, NM_033355, NM_033356, NM_033357, NM_033358, NR_111983

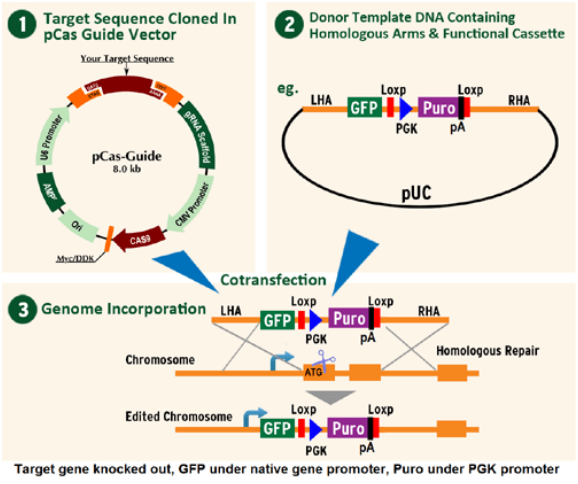
UniProt ID: Q14790

Synonyms: ALPS2B; CAP4; Casp-8; FLICE; MACH; MCH5

Summary:

This gene encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes composed of a prodomain, a large protease subunit, and a small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This protein is involved in the programmed cell death induced by Fas and various apoptotic stimuli. The N-terminal FADD-like death effector domain of this protein suggests that it may interact with Fas-interacting protein FADD. This protein was detected in the insoluble fraction of the affected brain region from Huntington disease patients but not in those from normal controls, which implicated the role in neurodegenerative diseases. Many alternatively spliced transcript variants encoding different isoforms have been described, although not all variants have had their full-length sequences determined. [provided by RefSeq, Jul 2008]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter