

# **Product datasheet for KN216248BN**

### OriGene Technologies, Inc.

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## **Caspase 8 (CASP8) 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: Caspase 8

Locus ID: 841

**Components: KN216248G1**, Caspase 8 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN216248G2**, Caspase 8 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN216248BND, 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 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

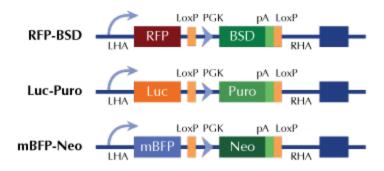


#### **Summary:**

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:**

#### Donor Vector Edited Chromosome



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