

## **Product datasheet for RG217090**

## Caspase 8 (CASP8) (NM 033358) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Caspase 8 (CASP8) (NM\_033358) Human Tagged ORF Clone

Tag: TurboGFP Symbol: Caspase 8

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

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG217090 representing NM\_033358

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

AGCAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Protein Sequence: >RG217090 representing NM\_033358

Red=Cloning site Green=Tags(s)

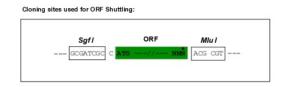
MDFSRNLYDIGEQLDSEDLASLKFLSLDYIPQRKQEPIKDALMLFQRLQEKRMLEESNLSFLKELLFRIN RLDLLITYLNTRKEEMERELQTPGRAQISAYRVMLYQISEEVSRSELRSFKFLLQEEISKCKLDDDMNLL DIFIEMEKRVILGEGKLDILKRVCAQINKSLLKIINDYEEFSKERSSSLEGSPDEFSNDFGQSLPNEKQT SGILSDHQQSQFCKSTGESAQTSQH

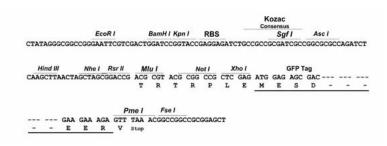
TRTRPLE - GFP Tag - V

Chromatograms: <a href="https://cdn.origene.com/chromatograms/ja1728">https://cdn.origene.com/chromatograms/ja1728</a> d10.zip

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





**ACCN:** NM\_033358

ORF Size: 705 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).



**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 033358.4</u>

RefSeq Size: 1088 bp
RefSeq ORF: 708 bp
Locus ID: 841

UniProt ID: Q14790
Cytogenetics: 2q33.1

**Protein Families:** Druggable Genome, Protease

Protein Pathways: Alzheimer's disease, Apoptosis, Huntington's disease, NOD-like receptor signaling pathway,

p53 signaling pathway, Pathways in cancer, RIG-I-like receptor signaling pathway, Toll-like

receptor signaling pathway, Viral myocarditis

**Gene 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

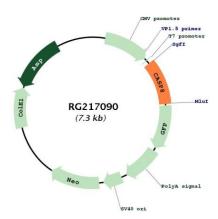
patients but not in those from normal controls, which implicated the role in

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:**



Circular map for RG217090