



## Human CASP8 peptide (DAG-P0299)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

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| <b>Antigen Description</b>   | 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] |
| <b>Specificity</b>           | Isoform 1, isoform 5 and isoform 7 are expressed in a wide variety of tissues. Highest expression in peripheral blood leukocytes, spleen, thymus and liver. Barely detectable in brain, testis and skeletal muscle.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purity</b>                | 70 - 90% by HPLC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Conjugate</b>             | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Sequence Similarities</b> | Belongs to the peptidase C14A family. Contains 2 DED (death effector) domains.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Format</b>                | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Preservative</b>          | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage</b>               | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### GENE INFORMATION

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| <b>Gene Name</b>           | <a href="#">CASP8 caspase 8, apoptosis-related cysteine peptidase [ Homo sapiens (human) ]</a>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Official Symbol</b>     | CASP8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Synonyms</b>            | CASP8; caspase 8, apoptosis-related cysteine peptidase; CAP4; MACH; MCH5; FLICE; ALPS2B; Casp-8; caspase-8; FADD-like ICE; MACH-alpha-1/2/3 protein; apoptotic protease Mch-5; MACH-beta-1/2/3/4 protein; apoptotic cysteine protease; ICE-like apoptotic protease 5; MORT1-associated ced-3 homolog; FADD-homologous ICE/CED-3-like protease; caspase 8, apoptosis-related cysteine protease;                                                                                                                       |
| <b>Entrez Gene ID</b>      | <a href="#">841</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>mRNA Refseq</b>         | <a href="#">NM_001080124.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Protein Refseq</b>      | <a href="#">NP_001073593.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>UniProt ID</b>          | Q14790                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Chromosome Location</b> | 2q33-q34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Pathway</b>             | AGE/RAGE pathway, organism-specific biosystem; Activated TLR4 signalling, organism-specific biosystem; Activation, myristoylation of BID and translocation to mitochondria, organism-specific biosystem; Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Alzheimers Disease, organism-specific biosystem; Apoptosis, organism-specific biosystem; Apoptosis, organism-specific biosystem; Apoptosis, conserved biosystem; Apoptosis, organism-specific biosystem; Apoptosi |
| <b>Function</b>            | cysteine-type endopeptidase activity; cysteine-type endopeptidase activity; cysteine-type endopeptidase activity involved in apoptotic process; cysteine-type endopeptidase activity involved in apoptotic signaling pathway; cysteine-type peptidase activity;                                                                                                                                                                                                                                                      |