



# Recombinant Rat Caspase-1 (Casp1), partial

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|--------------------------|---|
| <b>Product Code</b>      | CSB-EP004543RA  |
| <b>Storage</b>           | Store at -20°C, for extended storage, conserve at -20°C or -80°C.   |
| <b>Uniprot No.</b>       | P43527  |
| <b>Product Type</b>      | Recombinant Protein   |
| <b>Immunogen Species</b> | Rattus norvegicus (Rat)   |
| <b>Purity</b>            | >85% (SDS-PAGE)   |
| <b>Source</b>            | E.coli  |
| <b>Target Names</b>      | Casp1   |
| <b>Protein Names</b>     | Recommended name: Caspase-1 Short name= CASP-1 EC= 3.4.22.36<br>Alternative name(s): Interleukin-1 beta convertase Short name= IL-1BC<br>Interleukin-1 beta-converting enzyme Short name= ICE Short name= IL-1 beta-co  |
| <b>Expression Region</b> | -   |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.   |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.   |
| <b>Protein Length</b>    | Partial   |
| <b>Target Details</b>    | This gene encodes a protein which is 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 which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This gene was identified by its ability to proteolytically cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing of this gene results in five transcript variants encoding distinct isoforms. |
| <b>Reconstitution</b>    | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.   |
| <b>Shelf Life</b>        | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.   |