Active Recombinant Human CASP9 protein

Cat. No. CASP9-49H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CASP9 was expressed in E. coli.
Species	Human
Source	E.coli
Description	Caspase-9 is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-9 also exists in cells as an inactive proenzyme. During the initiation of apoptosis procaspase-9 is processed at aspartate residues to form active caspase-9. As one of the initiator caspases, active caspase-9 functions to trigger activation of downstream effector caspases, leading to disassembly of cell structures.
Form	Lyophilized powder
Bio-activity	> 400 units/mg
Purity	≥90%
Unit Definition	One unit of the recombinant caspase-9 is the enzyme activity that cleaves 1 nmol of the caspase substrate LEHD-pNA (pNA: pnitroanaline) per hour at 37 centigrade in a reaction solution containing 50 mM Hepes, pH 7.2, 50 mM NaCl, 0.1% Chaps, 10 mM EDTA, 5% Glycerol, and 10 mM DTT.
Applications	Active caspase-9 is useful in studying enzyme regulation, determining target substrates, screening caspase inhibitors, or as a positive control in caspase activity

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	assays. We recommend using 1 unit/assay for analyzing caspase activity.
Notes	Centrifuge the vial prior to opening.
Storage	The lyophilized caspase-9 is stable for 1 year at –70 centigrade. Following reconstitution in PBS, the enzyme should be aliquoted and immediately stored at –70 centigrade. Avoid multiple freeze/thaw cycles as activity might decrease.
Reconstitution	Reconstitute to 1 unit per µl in PBS containing 15% glycerol.

GENE INFORMATION

Gene Name	CASP9 caspase 9, apoptosis-related cysteine peptidase [Homo sapiens]
Official Symbol	CASP9
Synonyms	CASP9; caspase 9, apoptosis-related cysteine peptidase; caspase 9, apoptosis related cysteine protease; caspase-9; APAF 3; ICE LAP6; MCH6; PPP1R56; protein phosphatase 1; regulatory subunit 56; apoptotic protease MCH-6; ICE-like apoptotic protease 6; apoptotic protease activating factor 3; protein phosphatase 1, regulatory subunit 56; APAF3; APAF-3; ICE-LAP6; CASPASE-9c;
Gene ID	842
mRNA Refseq	NM_001229
Protein Refseq	NP_001220
MIM	602234
UniProt ID	P55211

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Chromosome Location	1p36.21
Pathway	AKT phosphorylates targets in the cytosol, organism-specific biosystem; Activation of caspases through apoptosome-mediated cleavage, organism-specific biosystem; Adaptive Immune System, organism-specific biosystem; Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), conserved biosystem;
Function	cysteine-type endopeptidase activity; enzyme activator activity; peptidase activity; protein binding;

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