# abcam

## Product datasheet

# Recombinant human Caspase-9 protein (Tagged) ab198061

**2 References** 2 Images

**Description** 

**Product name** Recombinant human Caspase-9 protein (Tagged)

Biological activity Specific Activity: 0.11 pmol/min/µg.

**Assay conditions:** 50 mM HEPES, pH 7.2, 50 mM NaCl, 10 mM EDTA, 0.1% Chaps, 5% glycerol, 10 mM DTT, and 10  $\mu$ M Caspase 9 substrate. Incubate for 30 minutes at room

temperature. Fluorescence intensity is measured at exc380/em505 nm.

**Purity** >= 56 % SDS-PAGE.

Expression system Escherichia coli

Accession <u>P55211</u>

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

**Sequence** MDEADRRLLRRCRLRLVEELQVDQLWDALLSRELFRPHM

**IEDIQRAGSGS** 

RRDQARQLIIDLETRGSQALPLFISCLEDTGQDMLASFLRT

NRQAAKLSK

PTLENLTPVVLRPEIRKPEVLRPETPRPVDIGSGGFGDVG

ALESLRGNAD

LAYILSMEPCGHCLIINNVNFCRESGLRTRTGSNIDCEKLRR

RFSSLHFM

VEVKGDLTAKKMVLALLELAQQDHGALDCCVVVILSHGC

QASHLQFPGAV

YGTDGCPVSVEKIVNIFNGTSCPSLGGKPKLFFIQACGGE

**QKDHGFEVAS** 

TSPEDESPGSNPEPDATPFQEGLRTFDQLDAISSLPTPSD

**IFVSYSTFPG** 

FVSWRDPKSGSWYVETLDDIFEQWAHSEDLQSLLLRVAN

AVSVKGIYKQM PGCFNFLRKKLFFKTSHHHHHH

Amino acids 1 to 416

Tags His tag C-Terminus

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#### Additional sequence information

Procaspase- 9 is autocleaved between the prodomain and large protease subunit (p35). The cleavage product, contains both the large (p35) and small (p10 [His-tag]) protease subunits. MWt: 35 & 10 kDa

#### **Specifications**

Our **Abpromise guarantee** covers the use of **ab198061** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

**Functional Studies** 

Form Liquid

#### **Preparation and Storage**

**Stability and Storage** Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Preservative: 0.54% Imidazole

Constituents: 0.05% (R\*,R\*)-1,4-Dimercaptobutan-2,3-diol, 20% Glycerol (glycerin, glycerine),

0.02% Potassium chloride, 0.64% Sodium chloride, 0.61% Tris

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### **General Info**

**Function** Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of

caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates

caspase-3. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP). Isoform 2 lacks activity is an dominant-negative inhibitor of caspase-9.

**Tissue specificity**Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle,

and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

Cleavages at Asp-315 by granzyme B and at Asp-330 by caspase-3 generate the two active

**Sequence similarities**Belongs to the peptidase C14A family.

Contains 1 CARD domain.

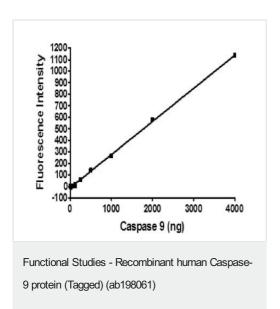
**Developmental stage** Expressed at low levels in fetal heart, at moderate levels in neonate heart, and at high levels in

adult heart.

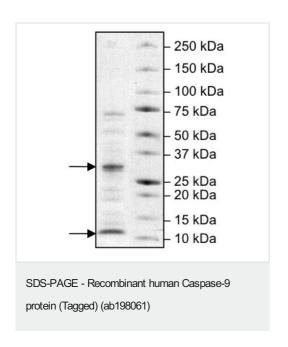
Post-translational

**modifications** subunits. Caspase-8 and -10 can also be involved in these processing events.

Images



Activity assay using ab198122.



4-20% SDS-PAGE analysis of 2.5  $\mu g$  ab198061 with Coomassie staining.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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