

# Recombinant human Caspase-8 protein ab54117

## 2 图像

### 描述

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产品名称	重组人Caspase-8蛋白
生物活性	Minimum Specific Activity: 5000 units/mg. One unit of the recombinant Caspase-8 is the enzyme activity that cleaves 1 nmol of the caspase substrate IETD-pNA (pNA: p-nitroaniline) per hour at 37°C 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.
纯度	> 95 % SDS-PAGE.
表达系统	Escherichia coli
Accession	<b><u>Q14790</u></b>
蛋白长度	Protein fragment
无动物成分	No
性质	Recombinant
种属	Human
标签	His tag N-Terminus

### 技术指标

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Our **Abpromise guarantee** covers the use of **ab54117** in the following tested applications.

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

应用	SDS-PAGE Functional Studies Western blot
形式	Lyophilized
补充说明	This product is manufactured by BioVision, an Abcam company and was previously called 1088 Caspase-8, human recombinant. 1088-25 is the same size as the 25 unit size of ab54117.

### 制备和贮存

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稳定性和存储	Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. Constituents: PBS, 15% Glycerol (glycerin, glycerine)
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This product is an active protein and may elicit a biological response in vivo, handle with caution.

## 复溶

Reconstitute to 1 unit per  $\mu\text{l}$  in PBS containing 15% glycerol.

## 常规信息

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### 功能

Most upstream protease of the activation cascade of caspases responsible for the TNFRSF6/FAS mediated and TNFRSF1A induced cell death. Binding to the adapter molecule FADD recruits it to either receptor. The resulting aggregate called death-inducing signaling complex (DISC) performs CASP8 proteolytic activation. The active dimeric enzyme is then liberated from the DISC and free to activate downstream apoptotic proteases. Proteolytic fragments of the N-terminal propeptide (termed CAP3, CAP5 and CAP6) are likely retained in the DISC. Cleaves and activates CASP3, CASP4, CASP6, CASP7, CASP9 and CASP10. May participate in the GZMB apoptotic pathways. Cleaves ADPRT. Hydrolyzes the small-molecule substrate, Ac-Asp-Glu-Val-Asp-AMC. Likely target for the cowpox virus CRMA death inhibitory protein. Isoform 5, isoform 6, isoform 7 and isoform 8 lack the catalytic site and may interfere with the pro-apoptotic activity of the complex.

### 组织特异性

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.

### 疾病相关

Defects in CASP8 are the cause of caspase-8 deficiency (CASP8D) [MIM:607271]. CASP8D is a disorder resembling autoimmune lymphoproliferative syndrome (ALPS). It is characterized by lymphadenopathy, splenomegaly, and defective CD95-induced apoptosis of peripheral blood lymphocytes (PBLs). It leads to defects in activation of T-lymphocytes, B-lymphocytes, and natural killer cells leading to immunodeficiency characterized by recurrent sinopulmonary and herpes simplex virus infections and poor responses to immunization.

### 序列相似性

Belongs to the peptidase C14A family.  
Contains 2 DED (death effector) domains.

### 结构域

Isoform 9 contains a N-terminal extension that is required for interaction with the BCAP31 complex.

### 翻译后修饰

Generation of the subunits requires association with the death-inducing signaling complex (DISC), whereas additional processing is likely due to the autocatalytic activity of the activated protease. GZMB and CASP10 can be involved in these processing events.  
Phosphorylated upon DNA damage, probably by ATM or ATR.

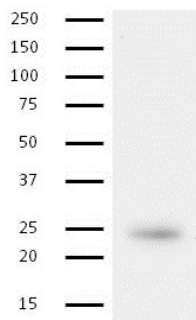
### 细胞定位

Cytoplasm.

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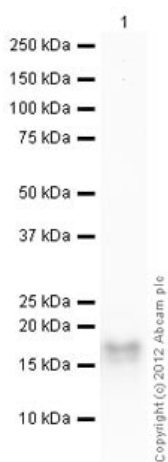
## 图片

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Western blot - Recombinant human Caspase-8 protein (ab54117)

Sample: Recombinant caspase 8 protein ab54117 at 100 ng.  
 Primary antibody: Cleaved caspase 8 at 1:1000. Secondary antibody: Goat polyclonal to Rabbit IgG H&L at 1:10000.  
 Development: ECL for exposure 10 min. Predicted band size: 18 kDa. Observed band size: 24 kDa.



Western blot - Recombinant human Caspase-8 protein (ab54117)

Anti-Caspase-8 antibody ([ab25901](#)) at 1 µg/ml + Recombinant human Caspase-8 protein (ab54117) at 0.01 µg

**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Exposure time:** 1 minute

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

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