# abcam

## Product datasheet

## Anti-Caspase-8 antibody ab227430

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概述

产品名称 Anti-Caspase-8抗体

描述 兔多克隆抗体to Caspase-8

**宿主** Rabbit

免疫原 Recombinant fragment within Human Caspase-8 (internal sequence). The exact sequence is

proprietary.

Database link: Q14790

**阳性**对照 WB: Neuro-2a, C8D30, NIH/3T3, C2C12, HeLa, Jurkat, Raji, NCI-H929, PC-12 and Rat2 whole

cell lysate. IHC: Human colon cancer tissue. ICC/IF: HeLa cells.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

纯**度** Immunogen affinity purified

 克隆
 多克隆

 同种型
 IgG

1

### The Abpromise guarantee

### Abpromise™承诺保证使用ab227430于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	*** <u>*</u> (2)	1/500 - 1/3000. Predicted molecular weight: 55 kDa.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

diam	1 -	-
жш	K-	•
41.3	. 471	N

#### 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

lsoform 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**

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

## 翻译后修饰

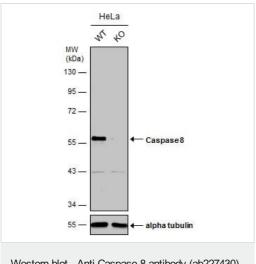
Generation of the subunits requires association with the death-inducing signaling complex (DISC), whereas additional processing is likely due to the autocatalytic activity of the activated protease.

GZMB and CASP10 can be involved in these processing events. Phosphorylated upon DNA damage, probably by ATM or ATR.

#### 细胞定位

Cytoplasm.

## 图片



Western blot - Anti-Caspase-8 antibody (ab227430)

All lanes: Anti-Caspase-8 antibody (ab227430) at 1/500 dilution

Lane 1: WT HeLa cell extract

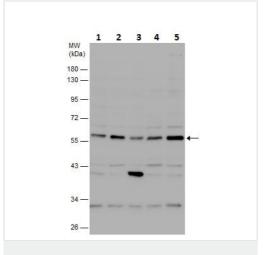
Lane 2: Caspase-8 Knockout HeLa cell extracts

Lysates/proteins at 30 µg per lane.

Secondary

All lanes: HRP-conjugated anti-rabbit lgG

Predicted band size: 55 kDa



Western blot - Anti-Caspase-8 antibody (ab227430)

All lanes: Anti-Caspase-8 antibody (ab227430) at 1/1000 dilution

Lane 1 : Neuro-2a (mouse neuroblastoma cell line) whole cell

lysate

Lane 2: C8D30 whole cell lysate

Lane 3: NIH/3T3 (mouse embryo fibroblast cell line) whole cell

lysate

Lane 4: RAW 264.7 (mouse macrophage cell line transformed

with Abelson murine leukemia virus) whole cell lysate

Lane 5: C2C12 (mouse myoblast cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

**Secondary** 

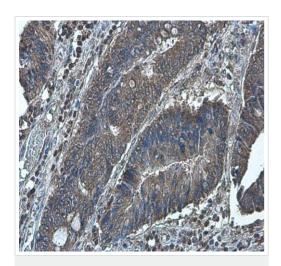
All lanes: HRP-conjugated anti-rabbit lgG

Developed using the ECL technique.

Performed under reducing conditions.

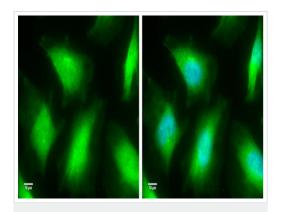
Predicted band size: 55 kDa

10% SDS-PAGE



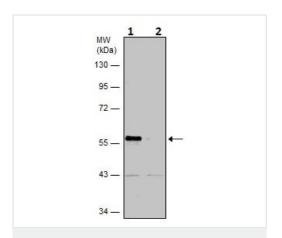
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Caspase-8 antibody (ab227430)

Paraffin-embedded human colon cancer tissue stained for Caspase-8 using ab227430 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-Caspase-8 antibody (ab227430)

HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for Caspase-8 (green) using ab227430 at 1/100 dilution in ICC/IF. Cells were fixed in 4% paraformaldehyde for 10 minutes. Counterstained: Hoechst 33342 (blue).



Western blot - Anti-Caspase-8 antibody (ab227430)

All lanes: Anti-Caspase-8 antibody (ab227430) at 1/500 dilution

**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2: Caspase-8 knockout HeLa whole cell lysate

Lysates/proteins at 30 µg per lane.

## Secondary

All lanes: HRP-conjugated anti-rabbit lgG

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 55 kDa

10% SDS-PAGE

1 2 3

MW
(kDa)

170 —

130 —

100 —

70 —

55 —

40 —

35 —

Western blot - Anti-Caspase-8 antibody (ab227430)

All lanes: Anti-Caspase-8 antibody (ab227430) at 1/1000 dilution

Lane 1 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 2: Raji (human Burkitt's lymphoma cell line) whole cell lysate

Lane 3: NCI-H929 whole cell lysate

Lysates/proteins at 30 µg per lane.

### **Secondary**

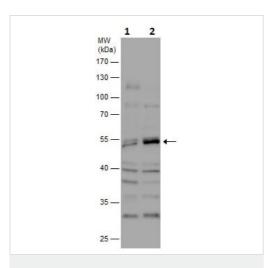
All lanes: HRP-conjugated anti-rabbit lgG

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 55 kDa

10% SDS-PAGE



Western blot - Anti-Caspase-8 antibody (ab227430)

All lanes: Anti-Caspase-8 antibody (ab227430) at 1/1000 dilution

**Lane 1**: PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 2: Rat2 (rat fibroblast cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

#### Secondary

All lanes: HRP-conjugated anti-rabbit lgG

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 55 kDa

10% SDS-PAGE

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