# abcam

# Product datasheet

# Anti-Caspase-8 antibody [E7] - BSA and Azide free ab232046



יעלטעבע RabMAb

## 画像数3

#### 製品の概要

製品名 Anti-Caspase-8 antibody [E7] - BSA and Azide free

製品の詳細 Rabbit monoclonal [E7] to Caspase-8 - BSA and Azide free

由来種 Rabbit

特異性 The antibody should recognize both pro-form (55kDa) and p18 cleaved-form of Caspase-8.

アプリケーション **適用あり:** WB

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Wild type/ Wild type treated with Staurosporin HAP1, Jurkat, IM-9, SH-SY5Y, and HeLa

(ab150035) cell lysates.

適用なし: Flow Cyt or ICC/IF

特記事項 ab232046 is the carrier-free version of ab32397.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**バッファー** pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** E7 **アイソタイプ** IgG

## アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab232046の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/500 - 1/1000. Detects a band of approximately 55 kDa (predicted molecular weight: 55 kDa).

# 追加情報

Is unsuitable for Flow Cyt or ICC/IF.

## ターゲット情報

#### 機能

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.

組織特異性

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.

関連疾患

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.

**配列類似性** Belongs to the peptidase C14A family.

Contains 2 DED (death effector) domains.

ドメイン Isoform 9 contains a N-terminal extension that is required for interaction with the BCAP31

complex.

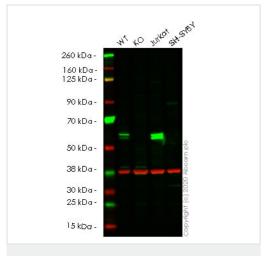
翻訳後修飾 Generation of the subunits requires association with the death-inducing signaling complex (DISC),

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.

細胞内局在 Cytoplasm.

### 画像



Western blot - Anti-Caspase-8 antibody [E7] - BSA and Azide free (ab232046)

**All lanes :** Anti-Caspase-8 antibody [E7] (<u>ab32397</u>) at 1/500 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: CASP8 knockout HeLa cell lysate

Lane 3 : Jurkat cell lysate

Lane 4: SH-SY5Y cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

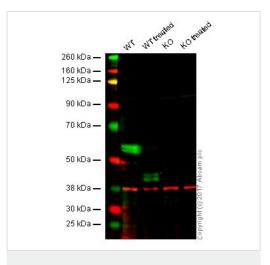
Predicted band size: 55 kDa Observed band size: 55 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab32397</u>).

Lanes 1-4: Merged signal (red and green). Green - <u>ab32397</u> observed at 55 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.

<u>ab32397</u> was shown to react with Caspase-8 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line <u>ab264958</u> (knockout cell lysate <u>ab256857</u>) was used. Wild-type HeLa and CASP8 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room

temperature in 0.1% TBST with 3% non-fat dried milk. <a href="mailto:ab32397">ab32397</a> and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) overnight at 4°C at a 1 in 500 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Caspase-8 antibody [E7] - BSA and Azide free (ab232046)

**All lanes :** Anti-Caspase-8 antibody [E7] (<u>ab32397</u>) at 1/500 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: Wild-type HAP1 whole cell lysate treated with Staurosporin

Lane 3: Caspase-8 knockout HAP1 whole cell lysate

Lane 4: Caspase-8 knockout HAP1 whole cell lysate treated with Staurosporin

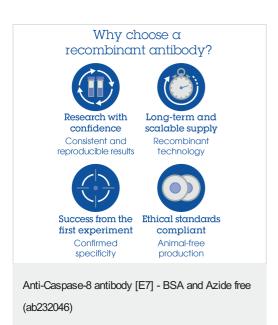
Lysates/proteins at 20 µg per lane.

Predicted band size: 55 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - <u>ab32397</u> observed at 55, 43/41 kDa. Red - loading control, <u>ab9484</u>, observed at 37 kDa.

ab32397 was shown to specifically react with HAP1 + Staurosproin when HAP1 + Staurosproin knockout samples were used. Wild-type and HAP1 + Staurosproin knockout samples were subjected to SDS-PAGE. ab32397 and ab9484 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32397).



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