# abcam

# Product datasheet

# Anti-Cleaved Caspase-3 antibody ab2302

★★★★☆ 58 Abreviews 1223 References 画像数 3

#### 製品の概要

製品名 Anti-Cleaved Caspase-3 antibody

製品の詳細 Rabbit polyclonal to Cleaved Caspase-3

由来種 Rabbit

アプリケーション **適用あり**: WB

種交差性 交差種: Human, Recombinant fragment

免疫原 Synthetic peptide corresponding to Human Cleaved Caspase-3. Synthetic peptide mapping to

the N-terminus adjacent to the cleavage site of human caspase-3

Database link: P42574

(Peptide available as ab38283)

ポジティブ・コントロール WB: HeLa (treated with staurosporine) whole cell lysate. Camptothecin treated Jurkat whole cell

lysate. Cleaved Caspase 3 recombinant protein.

特記事項 This product is manufactured by BioVision, an Abcam company and was previously called 3015

Anti-Caspase-3 (Active) Polyclonal Antibody.

Caspases are synthesized as inactive pro-enzymes that are processed to active form in cells undergoing apoptosis. Caspase 3 has been extensively studied and implicated to play an important role in apoptosis. Active caspase 3 proteolytically cleaves and activates other caspases, as well as relevant targets in the cells (e.g., PARP). This affinity purified antibody recognizing the active forms of caspase-3 provides a new tool for identifying apoptotic cell

populations in both tissue sections and cultured cells.

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

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

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パッファー Preservative: 0.03% Proclin 300

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 0.5% BSA, 0.146% EDTA

精製度 Immunogen affinity purified

一次抗体 備考 Caspases are synthesized as inactive pro-enzymes that are processed to active form in cells

undergoing apoptosis. Caspase 3 has been extensively studied and implicated to play an important role in apoptosis. Active caspase 3 proteolytically cleaves and activates other caspases, as well as relevant targets in the cells (e.g., PARP). This affinity purified antibody recognizing the active forms of caspase-3 provides a new tool for identifying apoptotic cell

populations in both tissue sections and cultured cells.

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab2302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	<b>★★★★ (16)</b>	1/50 - 1/500. Detects a band of approximately 17 kDa.

#### ターゲット情報

機能 Involved in the activation cascade of caspases responsible for apoptosis execution. At the onset

of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin. Triggers cell

adhesion in sympathetic neurons through RET cleavage.

組織特異性 Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal

muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune

system.

配列類似性 Belongs to the peptidase C14A family.

翻訳後修飾 Cleavage by granzyme B, caspase-6, caspase-8 and caspase-10 generates the two active

subunits. Additional processing of the propeptides is likely due to the autocatalytic activity of the activated protease. Active heterodimers between the small subunit of caspase-7 protease and

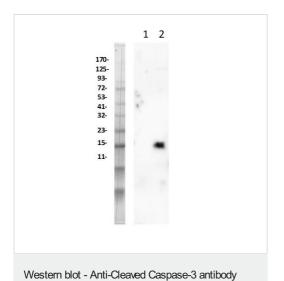
the large subunit of caspase-3 also occur and vice versa.

S-nitrosylated on its catalytic site cysteine in unstimulated human cell lines and denitrosylated upon activation of the Fas apoptotic pathway, associated with an increase in intracellular caspase

activity. Fas therefore activates caspase-3 not only by inducing the cleavage of the caspase zymogen to its active subunits, but also by stimulating the denitrosylation of its active site thiol.

細胞内局在 Cytoplasm.

#### 画像



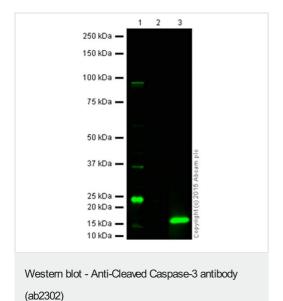
(ab2302)

**All lanes:** Anti-Cleaved Caspase-3 antibody (ab2302)

**Lane 1 :** Untreated Jurkat cell line (human T cell leukemia cell line from peripheral blood)

**Lane 2**: Camptothecin treated Jurkat cell line (human T cell leukemia cell line from peripheral blood)

Lysates/proteins at 60 µg per lane.



All lanes: Anti-Cleaved Caspase-3 antibody (ab2302) at 1 µg/ml

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate (2 uM Staurosporine, 4Hr) at 20 µg

Lane 2: HeLa whole cell lysate (untreated) at 20 µg

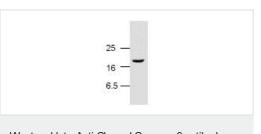
Lane 3: Cleaved Caspase 3 (recombinant protein) at 0.1 µg

## Secondary

All lanes: 800CW Goat Anti-Rabbit lgG at 1/10000 dilution

Performed under reducing conditions.

**Additional bands at:** 17 kDa (possible mature (processed) protein), 24 kDa, 35 kDa. We are unsure as to the identity of these extra bands.



Anti-Cleaved Caspase-3 antibody (ab2302) at 1 µg/ml + Camptothecin

 $(2~\mu M)$  treated Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Western blot - Anti-Cleaved Caspase-3 antibody (ab2302)

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

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