abcam

Product datasheet

Anti-Cleaved Caspase-3 antibody ab2302

★★★★★ 58 Abreviews 1223 References 3 图像

概述

产品名称 Anti-Cleaved Caspase-3抗体

描述 兔多克隆抗体to Cleaved Caspase-3

宿主 Rabbit

经测试应用 适用于: WB

种属反应性 与反应: 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)

阳性对照 WB: HeLa (treated with staurosporine) whole cell lysate. Camptothecin treated Jurkat whole cell

lysate. Cleaved Caspase 3 recombinant protein.

常规说明 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

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

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存储溶液 Preservative: 0.03% Proclin 300

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

纯**度** Immunogen affinity purified

Primary antibody说明 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.

应用

The Abpromise guarantee Abpromise™承诺保证使用ab2302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	★★★★ (16)	1/50 - 1/500. Detects a band of approximately 17 kDa.

靶标

功能 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.

组织特异性 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.

序列相似性 Belongs to the peptidase C14A family.

翻译后修饰 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

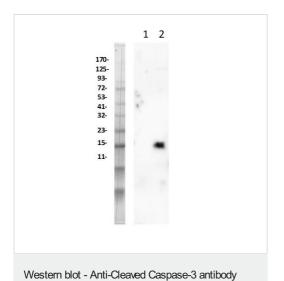
the large subunit of caspase-3 also occur and vice versa.

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.

细**胞定位** Cytoplasm.

图片



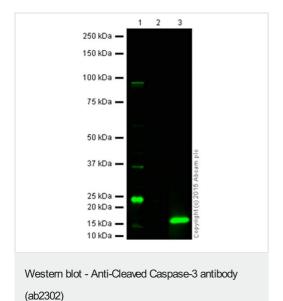
(ab2302)

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

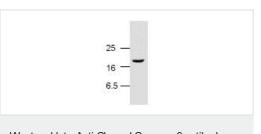
Lane 3: Cleaved Caspase 3 (recombinant protein) at 0.1 µg

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)

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