abcam

Product datasheet

Anti-Caspase-7 antibody ab92842



3 图像

概述

产**品名称** Anti-Caspase-7抗体

描述 兔多克隆抗体to Caspase-7

宿主 Rabbit

特异性 The immunogen used for this product detects both caspase-7 precursor and small 105 aa C-

terminal p12/12 kDa subunit in staurosporine (STS) treated cells.

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Human

免疫原 Synthetic peptide corresponding to Human Caspase-7 aa 250 to the C-terminus conjugated to

keyhole limpet haemocyanin.

Database link: P55210

(Peptide available as ab102735)

阳性对照 This antibody gave a positive signal in the following lysates: HepG2 (Human hepatocellular liver

carcinoma cell line) Whole Cell Lysate; Jurkat (Human T cell lymphoblast-like cell line) Whole Cell

Lysate; HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

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.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Protein A purified

 克隆
 多克隆

 同种型
 IgG

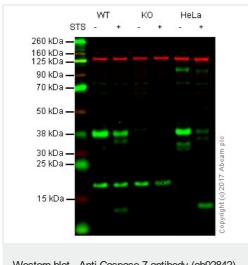
应用

The Abpromise guarantee Abpromise™承诺保证使用ab92842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		Use at an assay dependent concentration. Detects a band of approximately 35 kDa (predicted molecular weight: 34 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

靶标	
功能	Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-AspGly-217' bond. Overexpression promotes programmed cell death.
组织 特异性	Highly expressed in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis. No expression in the brain.
序列相似性	Belongs to the peptidase C14A family.
翻译后修饰	Cleavages by granzyme B or caspase-10 generate the two active subunits. Propeptide domains can also be cleaved efficiently by caspase-3. Active heterodimers between the small subunit of caspase-7 and the large subunit of caspase-3, and vice versa, also occur.
细 胞定位	Cytoplasm.
图片	



Western blot - Anti-Caspase-7 antibody (ab92842)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

Lane 2: Wild-type HAP1 treated with Staurosporin whole cell lysate $(20 \mu g)$

Lane 3: Caspase-7 knockout HAP1 whole cell lysate (20 µg)

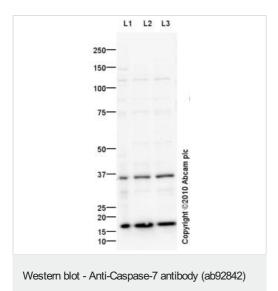
Lane 4: Caspase-7 knockout HAP1 treated with Staurosporin whole cell lysate (20 µg)

Lane 5: HeLa whole cell lysate (20 µg)

Lane 6: HeLa treated with Staurosporin whole cell lysate (20 µg)

Lanes 1 - 6: Merged signal (red and green). Green - ab92842 observed at 37, 12 kDa. Red - loading control, ab18058, observed at 130 kDa.

ab92842 was shown to recognize Caspase-7 in wild-type cells as signal was lost at the expected MW in Caspase-7 knockout cells. Additional cross-reactive bands were observed in the wild-type and Caspase-7 knockout cells. Wild-type and Caspase-7 knockout samples were subjected to SDS-PAGE. Ab92842 and ab18058 (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1 µg/ml and 1/10000 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 1/20000 dilution for 1 hour at room temperature before imaging.



All lanes: Anti-Caspase-7 antibody (ab92842) at 1 µg/ml

Lane 1 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 3: HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (HRP), pre-adsorbed at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

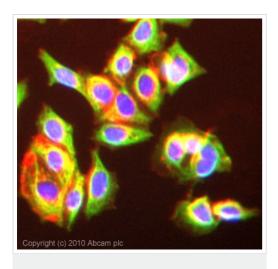
Predicted band size: 34 kDa **Observed band size:** 35 kDa

Additional bands at: 17 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 3 minutes

We hypothesize that the 15 kDa band represents the cleaved subunit (P11) of Caspase-7. Abcam welcomes customer feedback.



Immunocytochemistry/ Immunofluorescence - Anti-Caspase-7 antibody (ab92842)

ICC/IF image of <u>ab92845</u> stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab92842, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1:1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1:200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% PFA fixed (10 min) MCF7 cells at 5µg/ml.

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

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