abcam

Product datasheet

Anti-Caspase-7 antibody [E22] ab32522



★★★★★★ 2 Abreviews 24 References

画像数7

製品の概要

製品名 Anti-Caspase-7 antibody [E22]

製品の詳細 Rabbit monoclonal [E22] to Caspase-7

由来種 Rabbit

特異性 The antibody should recognize both pro-form and p20 cleaved-form. The antibody does not cross-

react with other Caspase family members.

アプリケーション 適用あり: WB, IHC-P, ICC/IF, IP, Flow Cyt (Intra)

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: Jurkat and HeLa whole cell lysate (ab150035). IHC-P: Human skin cancer tissue. ICC/IF:

HeLa cells. Flow Cyt (intra): HeLa cells. IP: Jurkat cell lysates

特記事項 Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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

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

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 E22 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ab32522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)	1/1000. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP	★★★ ☆☆ (1)	1/20.
Flow Cyt (Intra)		1/250.

ターゲット情報

機能 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-Asp-

-Gly-217' bond. Overexpression promotes programmed cell death.

組織特異性 Highly expressed in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis.

No expression in the brain.

配列類似性 Belongs to the peptidase C14A family.

翻訳後修飾 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.

細胞内局在 Cytoplasm.

画像



Western blot - Anti-Caspase-7 antibody [E22] (ab32522)

All lanes : Anti-Caspase-7 antibody [E22] (ab32522) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: CASP7 knockout HeLa cell lysate

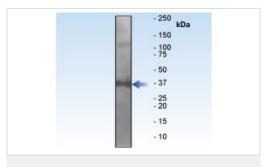
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 34 kDa **Observed band size:** 38 kDa

Lanes 1-2: Merged signal (red and green). Green - ab32522 observed at 38 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) observed at 50 kDa.

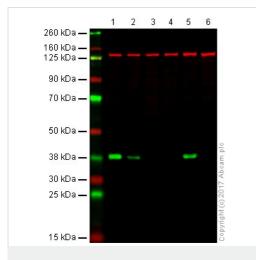
ab32522 was shown to react with pro Caspase-7 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab265777 (knockout cell lysate ab257380) was used. Wild-type HeLa and CASP7 knockout HeLa cell lysates were subjected to SDS-PAGE. ab32522 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) overnight at 4°C at a 1 in 1000 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-7 antibody [E22] (ab32522)

Anti-Caspase-7 antibody [E22] (ab32522) at 1/1000 dilution + Jurkat cell lysate

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



Western blot - Anti-Caspase-7 antibody [E22] (ab32522)



Lane 2: Wild type HAP1 + Staurosporine $\underline{ab120056}$ whole cell lysate (20 μ g)

Lane 3: CASP7 knockout HAP1 whole cell lysate (20 µg)

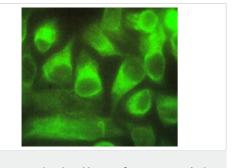
Lane 4: CASP7 + Staurosporine knockout HAP1 whole cell lysate (20 µg)

Lane 5: HeLa whole cell lysate (20 µg)

Lane 6: HeLa + Staurosporine whole cell lysate (20 µg)

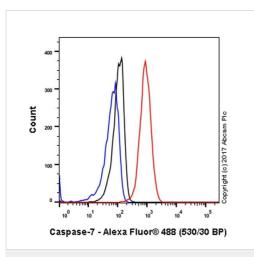
Lanes 1 - 6: Merged signal (red and green). Green - ab32522 observed at 38 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab32522 was shown to specifically react with HAP1 + Staurosporine when HAP1 + Staurosporine knockout samples were used. Wild-type and HAP1 + Staurosporine knockout samples were subjected to SDS-PAGE. Ab32522 and ab18058 (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



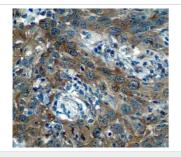
Immunocytochemistry/ Immunofluorescence - Anti-Caspase-7 antibody [E22] (ab32522)

Immunofluorescent staining of HeLa cells using ab32522 at 1:100 dilution.



Flow Cytometry (Intracellular) - Anti-Caspase-7 antibody [E22] (ab32522)

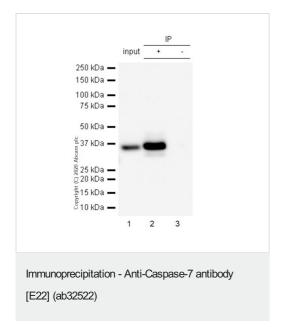
Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Caspase-7 (red) with ab32522 at a 1/250 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit lgG (Alexa Fluorr[®] 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal lgG (ab172730). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Caspase-7 antibody
[E22] (ab32522)

Immunohistochemical analysis of paraffin embedded human skin cancer tissue using ab32522 at 1:50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Purified ab32522 at 1/20 dilution (1µg) immunoprecipitating

Caspase-7 in Jurkat whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole

cell lysate 10µg

Lane 2 (+): ab32522 + Jurkat whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32522

in Jurkat whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000

dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 34 kDa

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