abcam

Product datasheet

Anti-DR5 antibody ab16329

* ★ ★ ★ ★ ↑ 1 Abreviews 3 References 4 Images

Overview

Product name Anti-DR5 antibody

Description Rabbit polyclonal to DR5

Host species Rabbit

Tested applications Suitable for: ICC, WB

Species reactivity Reacts with: Rat, Human

Immunogen Synthetic peptide:

CVPEQEMEVQEPAEPTG

, corresponding to amino acids 255-270 of Rat DR5.

Run BLAST with
Run BLAST with

Positive control WB: HeLa, PC12, A549 and HEL 92.1.7 cell lysate. ICC: HeLa and HCT 116 cells

General notes

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer Preservative: 0.05% Sodium azide

Constituents: PBS, 0.1% BSA

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

1

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab16329 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|--------------|---|
| ICC | | Use a concentration of 2 - 3 µg/ml. |
| WB | *** <u>*</u> | Use a concentration of 1 µg/ml. Predicted molecular weight: 58 kDa. |

Target

| Function | Receptor for the cytotoxic ligand TNFSF10/TRAIL. The adapter molecule FADD recruits |
|----------|--|
| | caspase-8 to the activated receptor. The resulting death-inducing signaling complex (DISC) |
| | performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases |

performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases) mediating apoptosis. Promotes the activation of NF-

kappa-B. Essential for ER stress-induced apoptosis.

Tissue specificity Widely expressed in adult and fetal tissues; very highly expressed in tumor cell lines such as

HeLaS3, K-562, HL-60, SW480, A-549 and G-361; highly expressed in heart, peripheral blood lymphocytes, liver, pancreas, spleen, thymus, prostate, ovary, uterus, placenta, testis, esophagus,

stomach and throughout the intestinal tract; not detectable in brain.

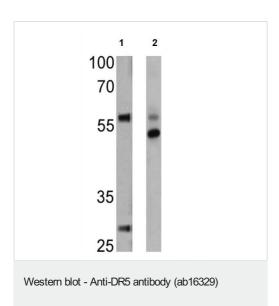
Involvement in disease Squamous cell carcinoma of the head and neck

Sequence similarities Contains 1 death domain.

Contains 3 TNFR-Cys repeats.

Cellular localization Membrane.

Images



All lanes: Anti-DR5 antibody (ab16329) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : PC12 cell lysate

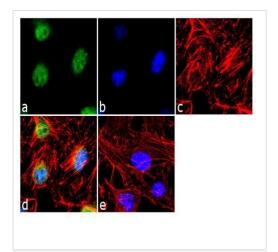
Lysates/proteins at 25 µg per lane.

Secondary

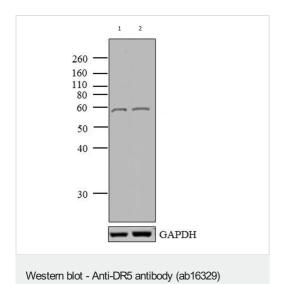
All lanes: HRP conjugated anti-rabbit

Developed using the ECL technique.

Predicted band size: 58 kDa **Observed band size:** 58 kDa



Immunocytochemistry - Anti-DR5 antibody (ab16329)



Immunocytochemistry analysis of DR5 was done on 70% confluent log phase HeLa cell. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with ab16329 at 2 µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at a dilution of 1/2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin at 1/300. Panel d is a merged image showing nuclear localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.

All lanes: Anti-DR5 antibody (ab16329) at 2 µg/ml

Lane 1: A549 cell lysate

Lane 2: HEL 92.1.7 cell lysate

Lysates/proteins at 20 µg per lane.

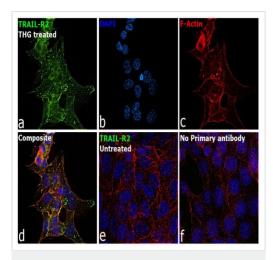
Secondary

All lanes : Goat anti-Rabbit lgG (H+L) Superclonal™ at 1/2500

dilution

Predicted band size: 58 kDa

Detected by chemiluminescence



Immunocytochemistry - Anti-DR5 antibody (ab16329)

Immunocytochemistry analysis of DR5 (TRAIL-R2) was performed using HCT 116 cells and HCT 116 treated with Thapsigargin (1 µM, 36 hours). The cells were fixed with 4% paraformaldehyde for 10 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with ab16329 at 2 µg/mL in 0.1% BSA and incubated overnight at 4 degree and then labeled with Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 at a dilution of 1/2000 for 45 minutes at room temperature (Panel a: green) in HCT 116 treated cells. Nuclei (Panel b: blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Rhodamine Phalloidin 1/300. Panel d represents the merged image of HCT116 treated cells, which shows higher expression for TRAIL-R2 protein showing localization in nucleus, cytoplasm and membrane. Panel e represents the merged image of untreated HCT 116 cells, that shows lower or no expression for TRAIL-R2 protein. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

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

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