abcam

ab249835

Anti-Caspase-14 antibody [EPR12927] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR12927
Purification technique	Affinity purification Protein A
Concentration	0.961 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information CASP14

Function Non-apoptotic caspase involved in epidermal differentiation. Is the predominant caspase in epidermal stratum corneum (PubMed:15556625). Seems to play a role in keratinocyte differentiation and is required for cornification. Regulates maturation of the epidermis by proteolytically processing filaggrin (By similarity). In vitro has a preference for the substrate [WY]-X-X-D motif and is active on the synthetic caspase substrate WEHD-ACF (PubMed:16854378, PubMed:19960512). Involved in processing of prosaposin in the epidermis (By similarity). May be involved in retinal pigment epithelium cell barrier function (PubMed:25121097).

Involved in DNA degradation in differentiated keratinocytes probably by cleaving DFFA/ICAD leading to liberation of DFFB/CAD (PubMed:24743736).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab249835 is the carrier-free version of ab174847.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

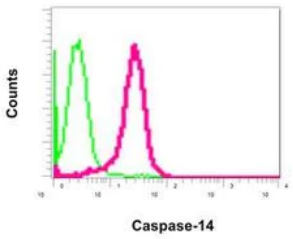
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

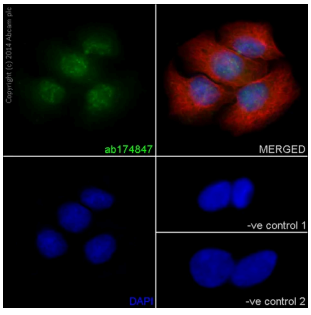
6 product images



Flow Cytometry (Intracellular) - Anti-Caspase-14 antibody [EPR12927] - BSA and Azide free (ab249835)

Caspase-14 Flow Cytometry (Intracellular) staining using rabbit Anti-Caspase-14 antibody

This data was developed using ab174847, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized HACAT cells labeling Caspase-14 using ab174847 at a 1/10 dilution (red), or rabbit IgG negative control (green).



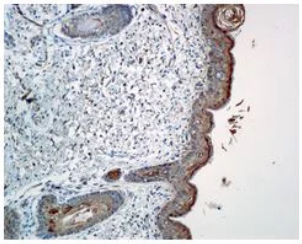
Immunocytochemistry/ Immunofluorescence - Anti-Caspase-14 antibody [EPR12927] - BSA and Azide free (ab249835)

Caspase-14 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Caspase-14 antibody

This data was developed using ab174847, the same antibody clone in a different buffer formulation.

Immunofluorescent staining of HaCaT cells labeling Caspase-14 (green) with ab174847 at 1:250 dilution, and labeling tubulin (red) with ab7291 at 1:500 (2 µg/ml). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) was used at 1:200 and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) was used at 1:200.

-ve control 1– Rabbit primary and anti-mouse secondary antibody. -ve control 2 – Mouse primary antibody and anti-rabbit secondary antibody.

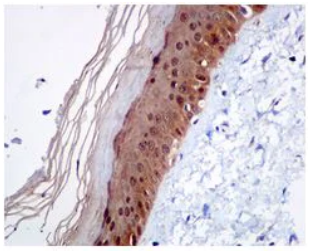


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-14 antibody [EPR12927] - BSA and Azide free (ab249835)

Caspase-14 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Caspase-14 antibody

This data was developed using ab174847, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human fetal skin tissue labeling Caspase-14 using ab174847 at a 1:100 dilution.

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

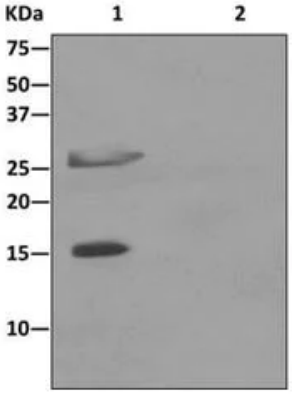


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-14 antibody [EPR12927] - BSA and Azide free (ab249835)

Caspase-14 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Caspase-14 antibody

This data was developed using ab174847, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human skin tissue labeling Caspase-14 using ab174847 at a 1:100 dilution.

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

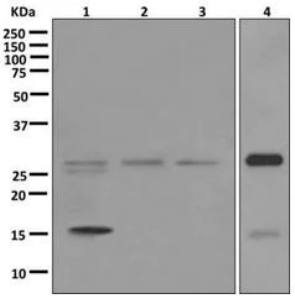


Immunoprecipitation - Anti-Caspase-14 antibody [EPR12927] - BSA and Azide free (ab249835)

This data was developed using ab174847, the same antibody clone in a different buffer formulation.
Western blot analysis on immunoprecipitation pellet from human fetal skin lysate (lane 1) or 1X PBS (lane 2, negative control) using ab174847 at 1:10 dilution, and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

All lanes:
Immunoprecipitation - Anti-Caspase-14 antibody [EPR12927] (ab174847)

Predicted band size: 28 kDa



Western blot - Anti-Caspase-14 antibody [EPR12927] - BSA and Azide free (ab249835)

Caspase-14 Western blot staining using rabbit Anti-Caspase-14 antibody

This data was developed using ab174847, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-Caspase-14 antibody [EPR12927] (ab174847) at 1/1000 dilution

Lane 1:
MCF7 cell lysate at 10 µg

Lane 2:
ECV-304 cell lysate at 10 µg

Lane 3:
HACAT cell lysate at 10 µg

Lane 4:
Human skin lysate at 10 µg

Predicted band size: 28 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.