abcam

ab174847

Anti-Caspase-14 antibody [EPR12927]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR12927
Purification technique	Affinity purification Protein A
Concentration	1.504 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

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	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

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

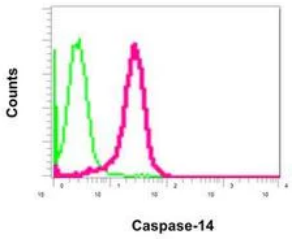
We do not recommend this combination. It is not covered by our product promise.

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.

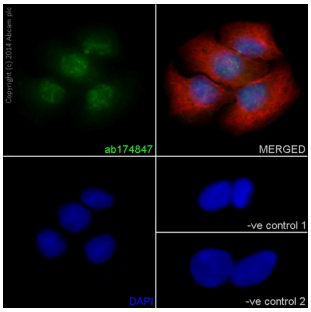
6 product images



Flow Cytometry (Intracellular) - Anti-Caspase-14 antibody [EPR12927] (ab174847)

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

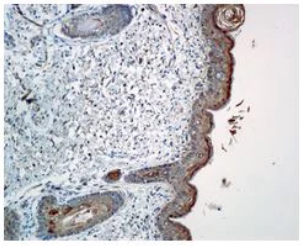
Intracellular flow cytometric analysis of permeabilized HACAT cells labeling Caspase-14using ab174847 at a 1/10 dilution (red), or rabbit IgG negative control (green).



Immunocytochemistry/ Immunofluorescence - Anti-Caspase-14 antibody [EPR12927] (ab174847)

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

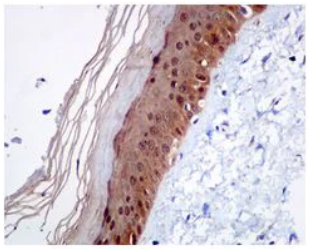
Immunofluorescent staining of HaCaT cells labeling Caspase-14 (green) with ab174847 at 1:250 dilution and labeling tubulin (red) with ab7291 at 1:500 (2 µg/ml). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) was used at 1:200 and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) was used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

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

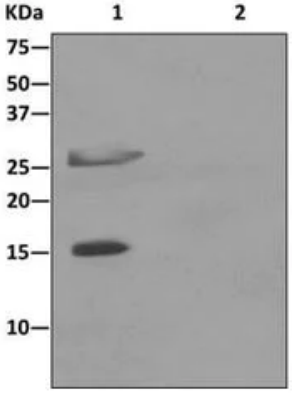
Immunohistochemical analysis of paraffin-embedded human fetal skin tissue labeling Caspase-14 using ab174847 at a 1:100 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-14 antibody [EPR12927] (ab174847)

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

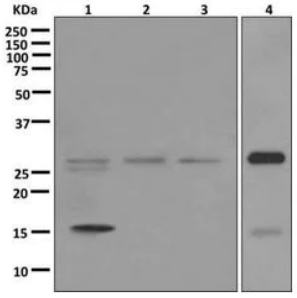
Immunohistochemical analysis of paraffin-embedded Human skin tissue labeling Caspase-14 using ab174847 at a 1:100 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

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] (ab174847)

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

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'.