

Product datasheet

Anti-Granzyme B antibody [EPR20129-217] ab208586

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Granzyme B antibody [EPR20129-217]
Description	Rabbit monoclonal [EPR20129-217] to Granzyme B
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, Flow Cyt, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein within Human Granzyme B aa 1 to the C-terminus. The exact sequence is proprietary. Database link: P10144
Positive control	WB: Human Granzyme B recombinant protein; NK-92 whole cell lysate. IHC-P: Human colon and cervix cancer tissues. ICC/IF: NK-92 cells. Flow Cyt: NK-92 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20129-217

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab208586** 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
WB		1/10000. Detects a band of approximately 28 kDa (predicted molecular weight: 28 kDa).
ICC/IF		1/100.
Flow Cyt		1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function

This enzyme is necessary for target cell lysis in cell-mediated immune responses. It cleaves after Asp. Seems to be linked to an activation cascade of caspases (aspartate-specific cysteine proteases) responsible for apoptosis execution. Cleaves caspase-3, -7, -9 and 10 to give rise to active enzymes mediating apoptosis.

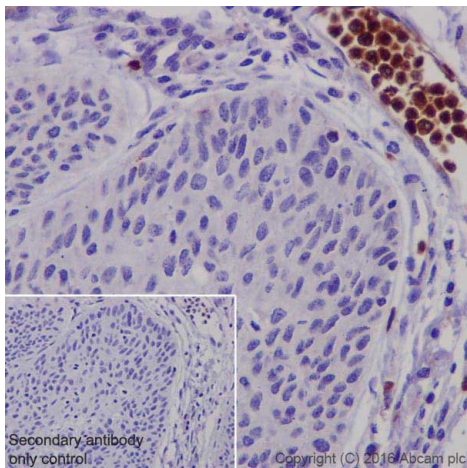
Sequence similarities

Belongs to the peptidase S1 family. Granzyme subfamily.
Contains 1 peptidase S1 domain.

Cellular localization

Cytoplasmic granule. Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells.

Images

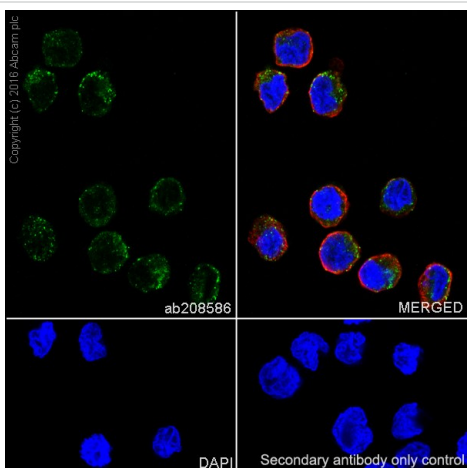


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR20129-217] (ab208586)

Immunohistochemical analysis of paraffin-embedded human cervix cancer tissue labeling Granzyme B with ab208586 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on neutrophils and stroma cells of human cervix cancer is observed [PMID: 14512315]. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

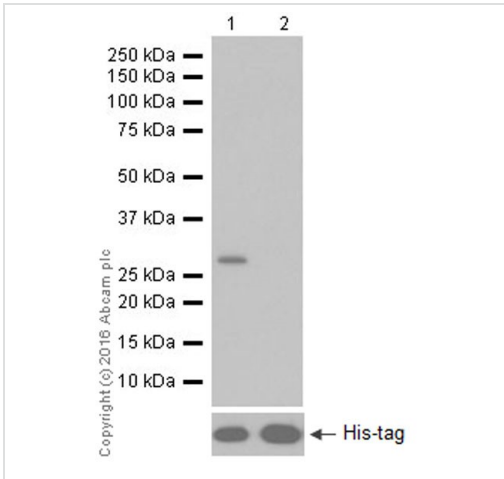


Immunocytochemistry/ Immunofluorescence - Anti-Granzyme B antibody [EPR20129-217] (ab208586)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NK-92 (Human peripheral blood malignant Non-Hodgkin's lymphoma cell line) cells labeling Granzyme B with ab208586 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on NK-92 cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) at 1/1000 dilution.



Western blot - Anti-Granzyme B antibody
[EPR20129-217] (ab208586)

All lanes : Anti-Granzyme B antibody [EPR20129-217] (ab208586)
at 1/10000 dilution

Lane 1 : Human Granzyme B recombinant protein

Lane 2 : Human Granzyme H recombinant protein

Lysates/proteins at 0.01 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at
1/100000 dilution

Predicted band size: 28 kDa

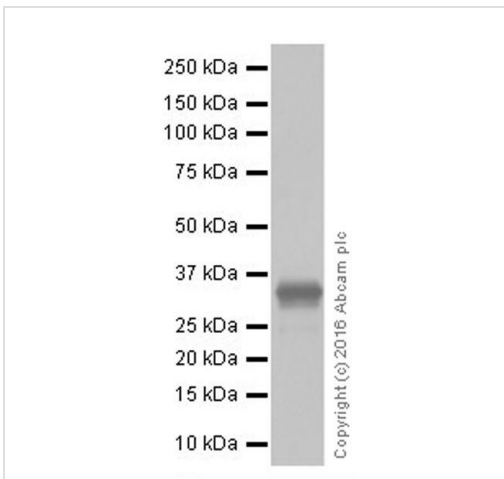
Observed band size: 26 kDa

[why is the actual band size different from the predicted?](#)

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFDm/TBST.

Human Granzyme B and human Granzyme H recombinant protein contain aa21-247 and aa21-246 with a His-tag. These two recombinant proteins were made in house.



Western blot - Anti-Granzyme B antibody
[EPR20129-217] (ab208586)

Anti-Granzyme B antibody [EPR20129-217] (ab208586) at
1/10000 dilution + NK-92 (Human peripheral blood malignant Non-Hodgkin's lymphoma cell line) whole cell lysate at 20 µg

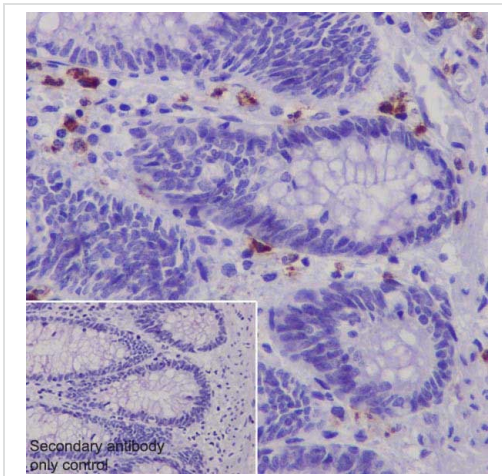
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 28 kDa

Observed band size: 28 kDa

Exposure time: 1 second

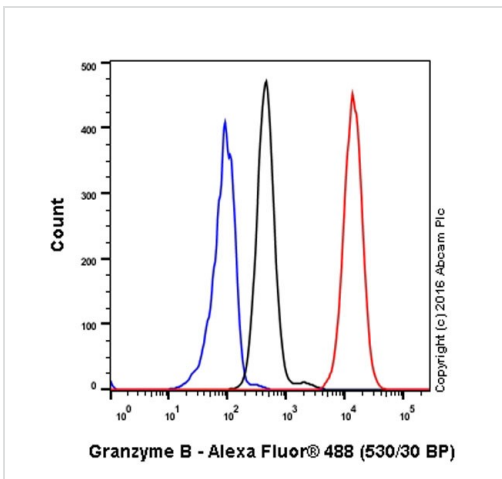


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR20129-217] (ab208586)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Granzyme B with ab208586 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on some stromal cells of human colon is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry - Anti-Granzyme B antibody [EPR20129-217] (ab208586)

Flow cytometric analysis of 4% paraformaldehyde-fixed NK-92 (Human peripheral blood malignant Non-Hodgkin's lymphoma cell line) cells labeling Granzyme B with ab208586 at 1/500 dilution (red) compared with Rabbit IgG, monoclonal [EPR25A] - Isotype Control(ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.

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