

Product datasheet

Anti-Granzyme B antibody [EPR20129-217] - BSA and Azide free ab219803

Recombinant RabMAb

[4 Images](#)

Overview

Product name	Anti-Granzyme B antibody [EPR20129-217] - BSA and Azide free
Description	Rabbit monoclonal [EPR20129-217] to Granzyme B - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, Flow Cyt, ICC/IF, WB
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein 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	<p>Ab219803 is the carrier-free version of ab208586. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>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.</p> <p>ab219803 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. <i>Maxpar® is a trademark of Fluidigm Canada Inc.</i></p>

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	Constituent: PBS
Carrier free	Yes

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20129-217
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab219803** in the following tested applications.

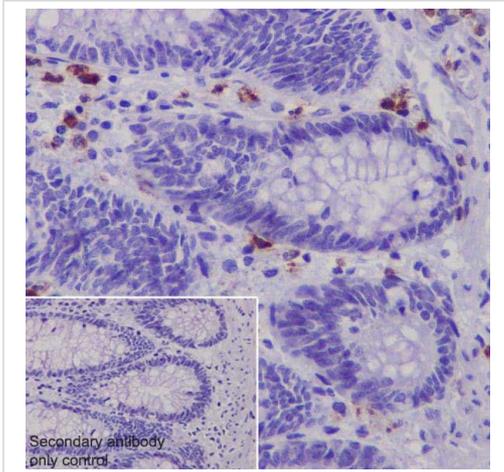
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 28 kDa (predicted molecular weight: 28 kDa).

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



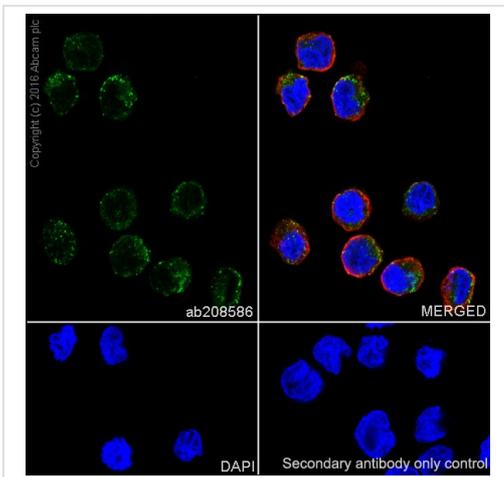
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR20129-217] - BSA and Azide free (ab219803)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab208586](#)).

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



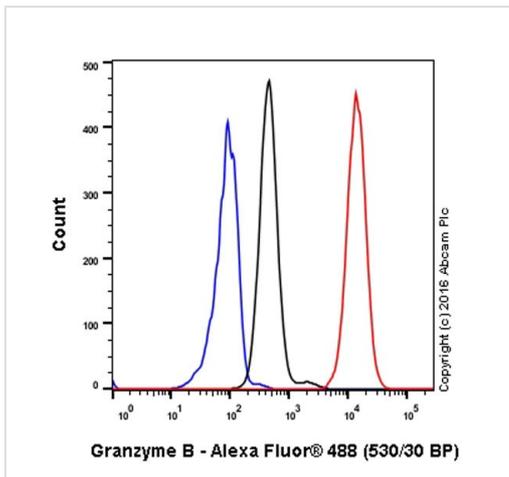
Immunocytochemistry/ Immunofluorescence - Anti-Granzyme B antibody [EPR20129-217] - BSA and Azide free (ab219803)

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.

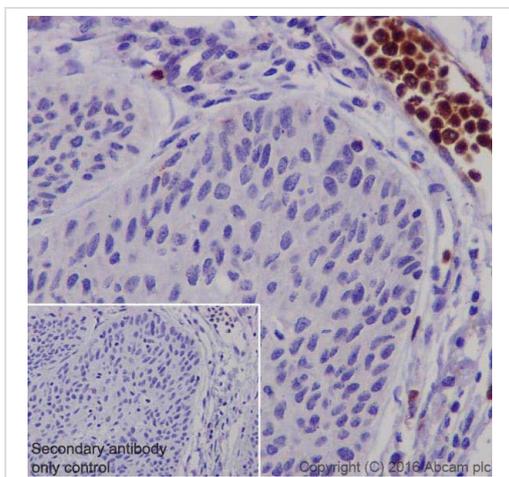
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab208586](#)).



Flow Cytometry - Anti-Granzyme B antibody
[EPR20129-217] - BSA and Azide free (ab219803)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab208586](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody
[EPR20129-217] - BSA and Azide free (ab219803)

This IHC data was generated using the same anti-Granzyme B antibody clone [EPR20129-217] in a different buffer formulation (cat# [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.

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

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