

# Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free ab255868

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [8 Images](#)

### Overview

<b>Product name</b>	Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR22645-206] to Granzyme B - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, IHC-Fr, IP, WB <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human tonsil and colon tissues; Mouse lung and spleen tissue IHC-Fr: Mouse spleen tissue; Rat spleen tissue IP: Mouse spleen tissue
<b>General notes</b>	<p>ab255868 is the carrier-free version of <a href="#">ab255598</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>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.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR22645-206
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab255868 in the following tested applications.

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

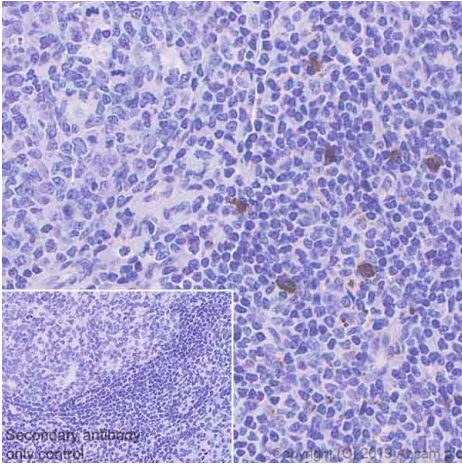
Application	Abreviews	Notes
IHC-P	★★★★★ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 27 kDa (predicted molecular weight: 27 kDa).

**Application notes** Is unsuitable for Flow Cyt or ICC/IF.

## Target

<b>Function</b>	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.
<b>Sequence similarities</b>	Belongs to the peptidase S1 family. Granzyme subfamily. Contains 1 peptidase S1 domain.
<b>Cellular localization</b>	Cytoplasmic granule. Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free (ab255868)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling Granzyme B with **ab255598** at 1/3000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on lymphocytes in human tonsil (PMID: 29042640) is observed.

The section was incubated with **ab255598** for 30 mins at RT.

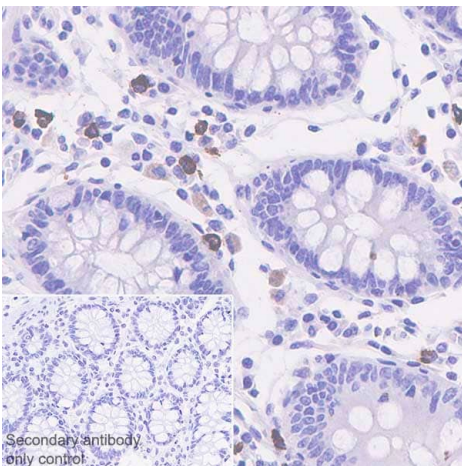
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab255598**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free (ab255868)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling Granzyme B with **ab255598** at 1/3000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on lymphocytes in human colon is observed.

The section was incubated with **ab255598** for 30 mins at RT.

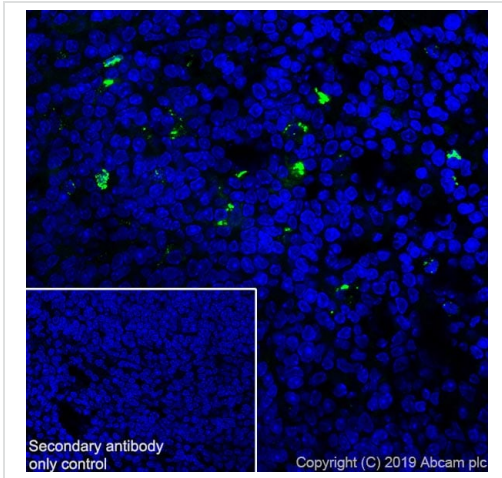
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab255598**).



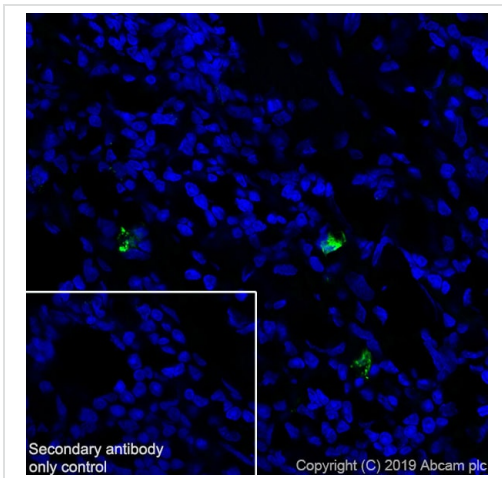
Immunohistochemistry (Frozen sections) - Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free (ab255868)

Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Mouse spleen tissue labeling **ab255598** with Granzyme B at 1/200 dilution followed by **ab150077** AlexaFluor<sup>®</sup>488 Goat anti-Rabbit secondary at 1/1000 dilution. The nuclear counterstain was DAPI (Blue).

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was **ab150077** AlexaFluor<sup>®</sup>488 Goat anti-Rabbit secondary 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 (**ab255598**).



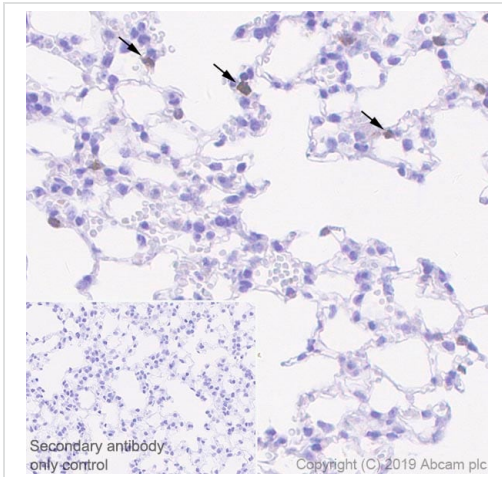
Immunohistochemistry (Frozen sections) - Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free (ab255868)

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Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was **ab150077** AlexaFluor 488 Goat anti-Rabbit secondary 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 (**ab255598**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free (ab255868)

Immunohistochemical analysis of paraffin-embedded Mouse lung tissue labeling Granzyme B with **ab255598** at 1/3000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on lymphocytes in mouse lung (PMID: 23642129) is observed.

The section was incubated with **ab255598** for 30 mins at RT.

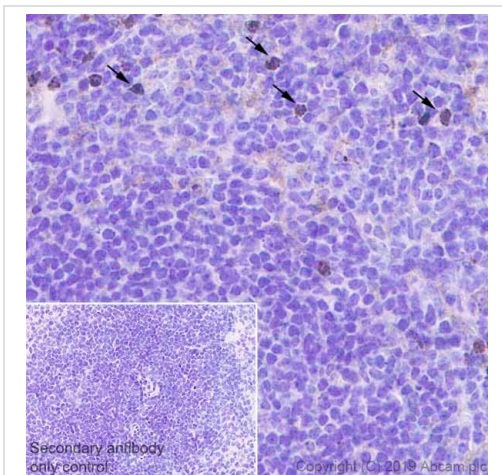
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab255598**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free (ab255868)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling Granzyme B with **ab255598** at 1/3000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on lymphocytes in mouse spleen (PMID: 7697916) is observed.

The section was incubated with **ab255598** for 30 mins at RT.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

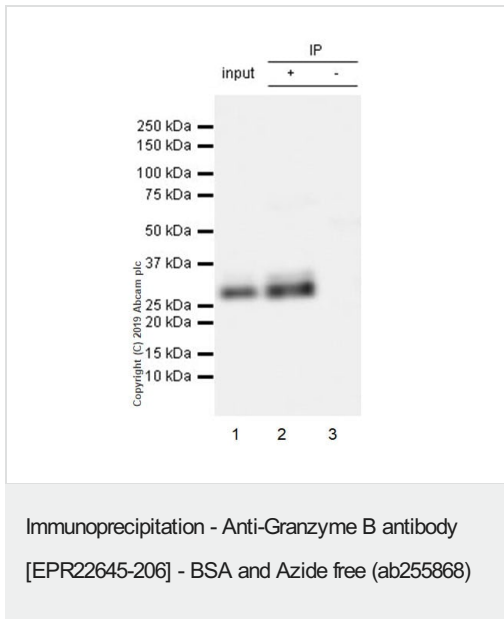
Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

This data was developed using the same antibody clone in a

different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab255598](#)).



Granzyme B was immunoprecipitated from 0.35 mg mouse spleen cells (treated with 2.5ug/ml Concanavalin A for 72h) whole cell lysate with [ab255598](#) at 1/30 dilution. Western blot was performed on the immunoprecipitate using [ab255598](#) 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used as the secondary antibody at 1/5000 dilution.

**Lane 1:** Mouse spleen cells (treated with 2.5ug/ml Concanavalin A for 72h) whole cell lysate 10µg

**Lane 2:** [ab255598](#) IP in mouse spleen cells (treated with 2.5ug/ml Concanavalin A for 72h) whole cell lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of [ab255598](#) in mouse spleen cells (treated with 2.5ug/ml Concanavalin A for 72h) whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 10 seconds

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab255598](#)).

Why choose a recombinant antibody?

- **Research with confidence**  
Consistent and reproducible results
- **Long-term and scalable supply**  
Recombinant technology
- **Success from the first experiment**  
Confirmed specificity
- **Ethical standards compliant**  
Animal-free production

Anti-Granzyme B antibody [EPR22645-206] - BSA and Azide free (ab255868)

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

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