# abcam

# Product datasheet

# Anti-Granzyme B antibody [EPR22645-206] ab255598

ועלשעבע RabMAb

★★★★★ 3 Abreviews 20 References 画像数9

#### 製品の概要

製品名 Anti-Granzyme B antibody [EPR22645-206]

製品の詳細 Rabbit monoclonal [EPR22645-206] to Granzyme B

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, IHC-Fr, IP

適用なし: Flow Cyt or ICC/IF

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Mouse splenocyte lysate. IHC-P: Human tonsil and colon tissues; Mouse lung and spleen

tissue. IHC-Fr: Mouse spleen tissue; Rat spleen tissue. IP: Mouse spleen tissue.

特記事項 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 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**.

#### 製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EPR22645-206

### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab255598の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000. Detects a band of approximately 27, 65 kDa (predicted molecular weight: 27 kDa).
IHC-P	★★★★☆(3)	1/3000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/200. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		1/30.

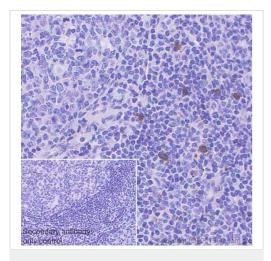
追加情報

Is unsuitable for Flow Cyt or ICC/IF.

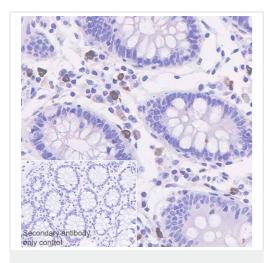
#### ターゲット情報

機能	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.
配列類似性	Belongs to the peptidase S1 family. Granzyme subfamily.  Contains 1 peptidase S1 domain.
細胞内局在	Cytoplasmic granule. Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells.

#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granzyme B antibody
[EPR22645-206] (ab255598)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granzyme B antibody
[EPR22645-206] (ab255598)

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 (<u>ab209101</u>).

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.

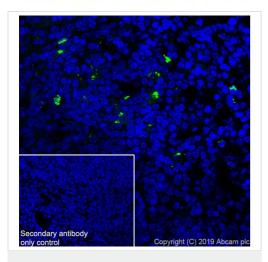
The section was incubated with ab255598 for 30 mins at RT.

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 (<u>ab209101</u>).

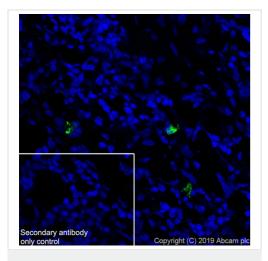


Immunohistochemistry (Frozen sections) - Anti-Granzyme B antibody [EPR22645-206] (ab255598)

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 <a href="mailto:ab150077">ab150077</a> AlexaFluor®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 <a href="mailto:ab150077"><u>ab150077</u></a> AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

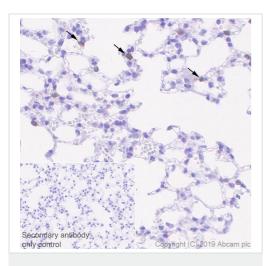


Immunohistochemistry (Frozen sections) - Anti-Granzyme B antibody [EPR22645-206] (ab255598)

Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Rat spleen tissue labeling ab255598 with Granzyme B at 1/200 dilution followed by <a href="mailto:ab150077">ab150077</a> 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 <u>ab150077</u> AlexaFluor 488 Goat anti-Rabbit secondary at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granzyme B antibody
[EPR22645-206] (ab255598)

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.

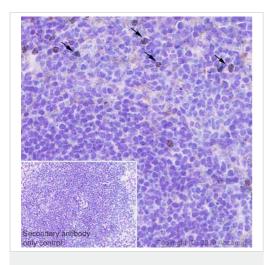
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

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).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Granzyme B antibody
[EPR22645-206] (ab255598)



Immunoprecipitation - Anti-Granzyme B antibody [EPR22645-206] (ab255598)

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).

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.

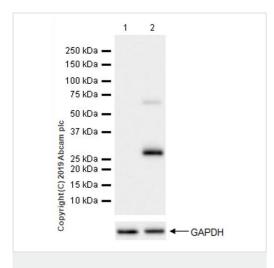
Lane 1: Mouse spleen cells (treated with 2.5ug/ml Concanavalin A for 72h) whole cell lysate 10µg

**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 (<u>ab172730</u>) 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



Western blot - Anti-Granzyme B antibody [EPR22645-206] (ab255598)

**All lanes :** Anti-Granzyme B antibody [EPR22645-206] (ab255598) at 1/1000 dilution

Lane 1: Untreated mouse splenocyte lysate

**Lane 2 :** Mouse splenocytes treated with 2.5µg/ml concanavalin for 72 hours, lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 27 kDa

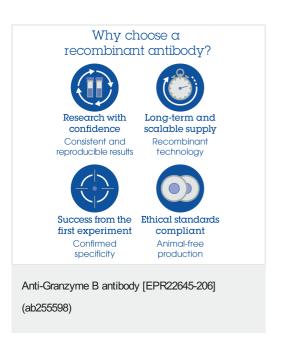
Observed band size: 28,65 kDa

Exposure time: 8 seconds

The expression of Granzyme B is elevated in stimulated splenocytes. Granzyme B forms complex with its protease inhibitor.

The molecular weight observed is consistent with what has been described in the literature (PMID: 8663264, 17116752, 21919028, 9774654).

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.



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