abcam

Product datasheet

# Anti-Granzyme B antibody [EPR8260] - Low endotoxin, Azide free ab214443

Recombinant RabMAb

1 References 5 Images

## Overview

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| **Product name** | Anti-Granzyme B antibody [EPR8260] - Low endotoxin, Azide free |
| **Description** | Rabbit monoclonal [EPR8260] to Granzyme B - Low endotoxin, Azide free |
| **Host species** | Rabbit |
| **Tested applications** | **Suitable for:** WB, Flow Cyt, IHC-P |
| **Species reactivity** | **Reacts with:** Human |
| **Immunogen** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **Positive control** | IHC-P: Human Hodgkins lymphoma and Human tonsil tissues WB: KARPAS-299, SR whole cell lysates; Flow cyt: No-GFP-CD16.NK-92 cells |
| **General notes** | ab214443 is the carrier-free version of **ab134933**.<br><br>Our **carrier-free** 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.<br><br>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.<br><br>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.<br><br>This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br><br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.<br><br>Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays. |

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

## Properties

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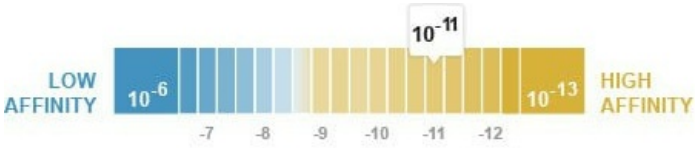
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| **Dissociation constant ($K_D$)** | $K_D = 7.80 \times 10^{-11}$ M |




Learn more about $K_D$

| | |
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| **Storage buffer** | pH: 7.2<br>Constituent: PBS |
| **Carrier free** | Yes |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |
| **Clone number** | EPR8260 |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab214443 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** | | Use at an assay dependent concentration. Predicted molecular weight: 28 kDa. |
| **Flow Cyt** | | Use at an assay dependent concentration. |
| **IHC-P** | | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.<br>For antigen retrieval: heat up to 98 degrees C, below boiling, and then let cool for 10-20 min. Use of an HRP/AP polymerized secondary antibody is recommended.<br>See **IHC antigen retrieval protocols** |

## 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

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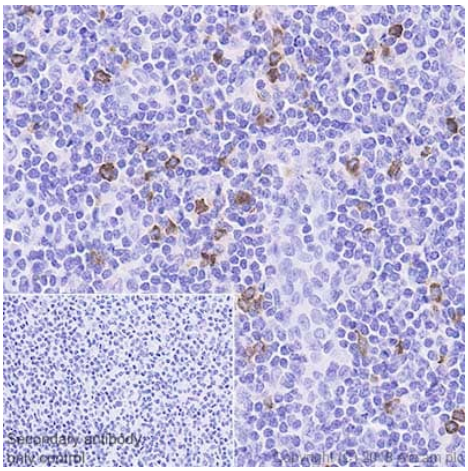
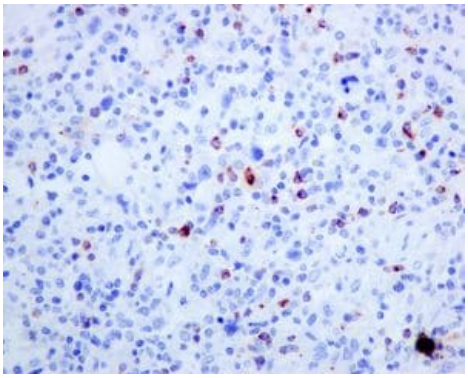
| | proteases) responsible for apoptosis execution. Cleaves caspase-3, -7, -9 and 10 to give rise to active enzymes mediating apoptosis. |
| **Sequence similarities** | Belongs to the peptidase S1 family. Granzyme subfamily.<br>Contains 1 peptidase S1 domain. |
| **Cellular localization** | Cytoplasmic granule. Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells. |

## Images




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR8260] - Low endotoxin, Azide free (ab214443)

This image was made using **ab134933** which is the same antibody as ab214443 with BSA and Azide Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human tonsil tissue sections labeling Granzyme B with Purified **ab134933** at 1:250 dilution (2.96 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

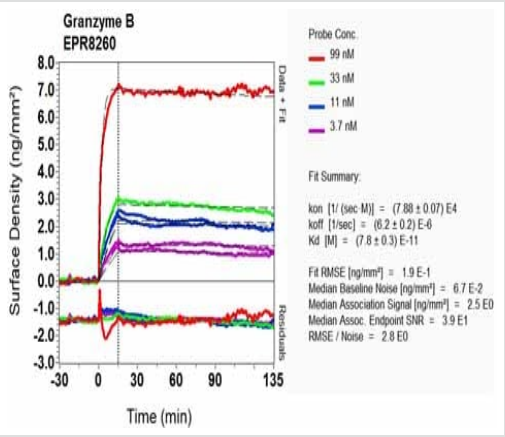


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR8260] - Low endotoxin, Azide free (ab214443)

This IHC data was generated using the same anti-Granzyme B antibody clone, EPR8260, in a different buffer formulation (cat# **ab134933**).

Immunohistochemical analysis of paraffin-embedded, formalin-fixed Human Hodgkin's lymphoma tissue, labelling Granzyme B using unpurified **ab134933** at a 1/100 dilution.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

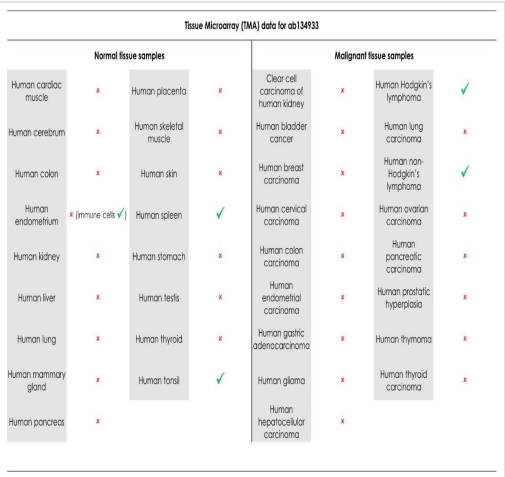



OI-RD Scanning - Anti-Granzyme B antibody [EPR8260] - Low endotoxin, Azide free (ab214443)

Equilibrium disassociation constant ($K_D$)

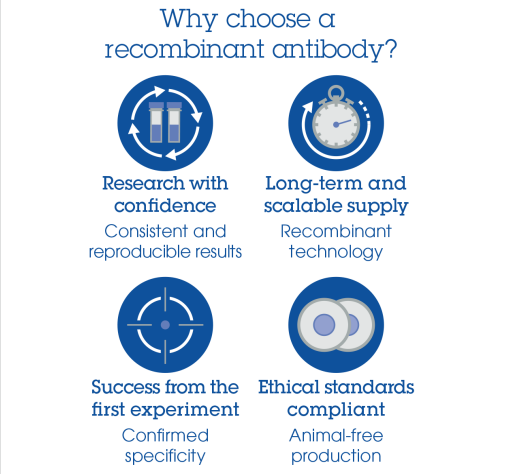
Learn more about $K_D$

**Click here to learn more about $K_D$**




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Granzyme B antibody [EPR8260] - Low endotoxin, Azide free (ab214443)

Tissue Microarrays stained for " Anti-Granzyme B antibody [EPR8260]" using " **ab134933**" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. The sections were incubated with **ab134933** for 30 mins at room temperature followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.




Anti-Granzyme B antibody [EPR8260] - Low endotoxin, Azide free (ab214443)

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