

Granzyme B Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50660**Specification**

Granzyme B Antibody - Product Information

Application	WB, IHC
Primary Accession	P10144
Other Accession	P20718
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27,18,13 KDa
Antigen Region	6-35

Granzyme B Antibody - Additional Information**Gene ID** 3002**Other Names**

Granzyme B, C11, CTLA-1, Cathepsin G-like 1, CTSL1, Cytotoxic T-lymphocyte proteinase 2, Lymphocyte protease, Fragmentin-2, Granzyme-2, Human lymphocyte protein, HLP, SECT, T-cell serine protease 1-3E, GZMB, CGL1, CSPB, CTLA1, GRB

Dilution

WB~~1:1000
IHC~~1:50-1:100

Format

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

Granzyme B Antibody - Protein Information**Name** GZMB {ECO:0000303|PubMed:32188940, ECO:0000312|HGNC:HGNC:4709}**Function**

Abundant protease in the cytosolic granules of cytotoxic T- cells and NK-cells which activates caspase-independent pyroptosis when delivered into the target cell through the immunological synapse (PubMed: [1985927](http://www.uniprot.org/citations/1985927)), PubMed: [3262682](http://www.uniprot.org/citations/3262682), PubMed: [3263427](http://www.uniprot.org/citations/3263427)). It cleaves after Asp (PubMed: [1985927](http://www.uniprot.org/citations/1985927), PubMed: [8258716](http://www.uniprot.org/citations/8258716)). Once delivered

into the target cell, acts by catalyzing cleavage of gasdermin-E (GSDME), releasing the pore-forming moiety of GSDME, thereby triggering pyroptosis and target cell death (PubMed:31953257, PubMed:32188940). Seems to be linked to an activation cascade of caspases (aspartate-specific cysteine proteases) responsible for apoptosis execution. Cleaves caspase-3, -9 and -10 (CASP3, CASP9 and CASP10, respectively) to give rise to active enzymes mediating apoptosis (PubMed:9852092). Cleaves and activates CASP7 in response to bacterial infection, promoting plasma membrane repair (By similarity).

Cellular Location

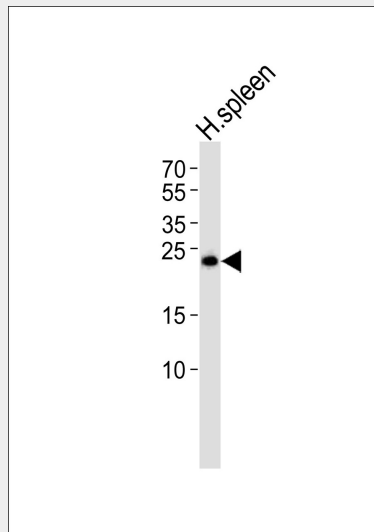
Secreted. Cytolytic granule. Note=Delivered into the target cell by perforin (PubMed:20038786).

Granzyme B Antibody - Protocols

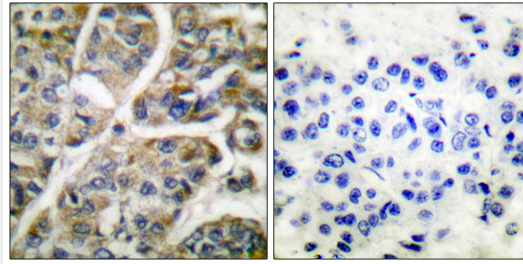
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Granzyme B Antibody - Images



Western blot analysis of lysate from human spleen tissue lysate, using Granzyme B Antibody (AP50660). AP50660 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Granzyme B antibody .

Granzyme B Antibody - Background

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.

Granzyme B Antibody - References

- Schmid J., et al. J. Immunol. 139:250-256(1987).
- Caputo A., et al. J. Biol. Chem. 263:6363-6369(1988).
- Trapani J.A., et al. Proc. Natl. Acad. Sci. U.S.A. 85:6924-6928(1988).
- Klein J.L., et al. Genomics 5:110-117(1989).
- Caputo A., et al. J. Immunol. 145:737-744(1990).