

**Granzyme B Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10054****Specification**

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**Granzyme B Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P10144</a>
Other Accession	<a href="#">NP_004122</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	27716

**Granzyme B Antibody - Additional Information****Gene ID** 3002**Application & Usage**

**Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually.**

**Target/Specificity**

Granzyme B

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) affinity purified polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

Granzyme B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**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:<a href="http://www.uniprot.org/citations/3262682" target="\_blank">3262682</a>, PubMed:<a href="http://www.uniprot.org/citations/3263427" target="\_blank">3263427</a>, PubMed:<a href="http://www.uniprot.org/citations/1985927" target="\_blank">1985927</a>). It cleaves after Asp (PubMed:<a href="http://www.uniprot.org/citations/8258716" target="\_blank">8258716</a>, PubMed:<a href="http://www.uniprot.org/citations/1985927" target="\_blank">1985927</a>). 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:<a href="http://www.uniprot.org/citations/32188940" target="\_blank">32188940</a>, PubMed:<a href="http://www.uniprot.org/citations/31953257" target="\_blank">31953257</a>). 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:<a href="http://www.uniprot.org/citations/9852092" target="\_blank">9852092</a>). Cleaves and activates CASP7 in response to bacterial infection, promoting plasma membrane repair (By similarity).

### Cellular Location

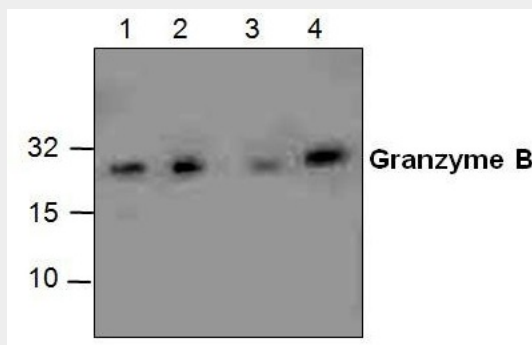
Secreted. Cytolytic granule. Note=Delivered into the target cell by perforin (PubMed:20038786).

### 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 Granzyme B in lysate from Jurkat cells (Lane1&2), 3T3 cells (Lane 3) and rat kidney (Lane 4).

### **Granzyme B Antibody - Background**

Granzyme B is a 27 kDa serine protease stored in granules of activated cytotoxic T cells and NK cells. Upon target cell contact, granzyme B is directionally exocytosed and assisted by perforin, enters the target cell. With its unique substrate specificity (granzyme B cleaves after Asp), granzyme B processes and activates various pro-caspases thereby inducing apoptosis in the target cell.