

Granzyme B Monoclonal Antibody
Purified Mouse Monoclonal Antibody
Catalog # ABV11510**Specification**

Granzyme B Monoclonal Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB |
| Primary Accession | P10144 |
| Reactivity | Human, Rat |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG2a |
| Calculated MW | 27716 |

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

Granzyme B, 3.4.21.79, 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

Target/Specificity

Granzyme B

Formulation

Concentrated mouse tissue culture supernatant (1 mg/ml) in PBS containing 30% glycerol, 0.1% BSA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Background Descriptions**Precautions**

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

Granzyme B Monoclonal 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, PubMed:3263427, PubMed:1985927). It cleaves after Asp (PubMed:8258716, PubMed:1985927). 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:32188940, PubMed:31953257). 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 Monoclonal 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 Monoclonal Antibody - Images

Granzyme B Monoclonal Antibody - Background

The Lytic enzymes of cytotoxic lymphocytes seem to be contained within lysosome-like granules found in the cytoplasm. These granules contain perforin, a membrane pore-forming protein, and a family of serine proteases (granzymes). Granzyme B, a 32 kDa protein, is a serine Aspartase associated with the granules of Natural Killer (NK) cells. Granzyme B seems to be able to elicit cell death, perhaps by activating an endogenous pathway of programmed cell death.