

Anti-Granzyme B Antibody
Catalog # ABO11046**Specification**

Anti-Granzyme B Antibody - Product Information

Application	WB
Primary Accession	P10144
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Granzyme B(GZMB) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Granzyme B 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

Calculated MW

Granzyme B KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

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.

Tissue Specificity

Cytoplasmic granule . Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Granzyme B(168-184aa QEDRKESDLRHYDST).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.

Anti-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, PubMed:3262682, PubMed:3263427). It cleaves after Asp (PubMed:1985927, PubMed: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

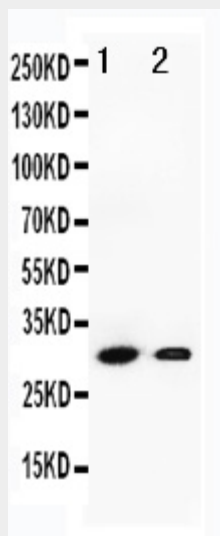
Secreted. Cytolytic granule. Note=Delivered into the target cell by perforin (PubMed:20038786).

Anti-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](#)

Anti-Granzyme B Antibody - Images



Anti-Granzyme B antibody, ABO11046, Western blotting Lane 1: SMMC Cell Lysate Lane 2: HEPA Cell Lysate

Anti-Granzyme B Antibody - Background

Granzyme B is a serine protease that in humans is encoded by the GZMB gene. Granzyme B is expressed by cytotoxic T lymphocytes(CTL) and natural killer(NK) cells. CTL and NK cells share the remarkable ability to recognize specific infected target cells. They are thought to protect their host by inducing apoptosis of cells that bear on their surface "nonself" antigens