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Anti-Granzyme B Antibody

Catalog # ABO11046

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.

Additional Information

Gene ID	3002
Other Names	Granzyme B, 3.4.21.79, C11, CTLA-1, Cathepsin G-like 1, CTSGL1, 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	27716
Application Details	Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
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 QEDRKCESDLRHYYDST).
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, 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.

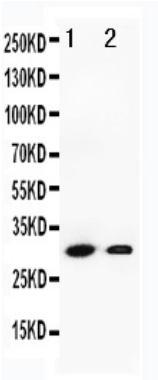
Protein Information

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).

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 though to protect their host by inducing apoptosis of cells that bear on their surface nonself" antigens

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.