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Granzyme B Antibody

Rabbit mAb
Catalog # AP91225

Product Information

Application	IHC, IF, ICC, IP, IHF
Primary Accession	P10144
Reactivity	Human
Clonality	Monoclonal
Other Names	Granzyme B; Cathepsin G-like 1; CTSGL1; Lymphocyte protease; Fragmentin-2; Granzyme-2; Human lymphocyte protein; SECT; GZMB; CGL1; CSPB; CTLA1, GRB;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	27716

Additional Information

Dilution	IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Granzyme B
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

Images

Image not found : 202311/AP91225-IHC.jpg	Immunohistochemical analysis of paraffin-embedded human T cell lymphoma, using Granzyme B Antibody.

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