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Anti-Granzyme A Antibody

Catalog # ABO10902

Product Information

Application	WB, IHC-P
Primary Accession	P12544
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Granzyme A(GZMA) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3001
Other Names	Granzyme A, 3.4.21.78, CTL tryptase, Cytotoxic T-lymphocyte proteinase 1, Fragmentin-1, Granzyme-1, Hanukkah factor, H factor, HF, GZMA, CTLA3, HFSP
Calculated MW	28999
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Granzyme A
Tissue Specificity	28999 MW
Source	Eukaryota
Protein Name	Isoform alpha: Secreted. Cytoplasmic granule.
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 in the middle region of human Granzyme A(175-190aa DRKVCNDRNHYNFNPV).
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.

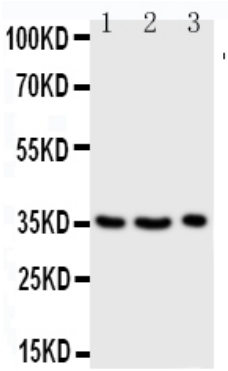
Protein Information

Name	GZMA {ECO:0000303|PubMed:32299851, ECO:0000312|HGNC:HGNC:4708}
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:12819770, PubMed:32299851, PubMed:3257574, PubMed:3262682, PubMed:3263427). It cleaves after Lys or Arg (PubMed:12819770, PubMed:32299851). Once delivered into the target cell, acts by catalyzing cleavage of gasdermin-B (GSDMB), releasing the pore-forming moiety of GSDMB, thereby triggering pyroptosis and target cell death (PubMed:32299851, PubMed:34022140, PubMed:36157507, PubMed:36899106). Cleaves APEX1 after 'Lys-31' and destroys its oxidative repair activity (PubMed:12524539). Cleaves the nucleosome assembly protein SET after 'Lys-189', which disrupts its nucleosome assembly activity and allows the SET complex to translocate into the nucleus to nick and degrade the DNA (PubMed:11555662, PubMed:12628186, PubMed:16818237).
Cellular Location	[Isoform alpha]: Secreted. Cytoplasmic granule. Note=Delivered into the target cell by perforin.

Background

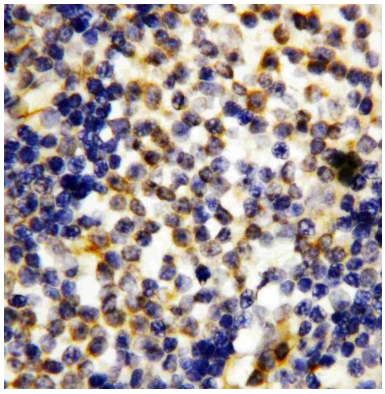
Granzyme A is a protein that in humans is encoded by the GZMA gene. Cytolytic T lymphocytes(CTL) and natural killer(NK) cells share the remarkable ability to recognize, bind, and lyse specific target cells. They are though to protect their host by lysing cells bearing on their surface nonself" antigens

Images



Anti-Granzyme A antibody, ABO10902, Western blottingLane 1: JURKAT Cell LysateLane 2: CEM Cell LysateLane 3: RAJI Cell Lysate

Anti-Granzyme A antibody, ABO10902, IHC(P)IHC(P): Human Tonsil Tissue



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