

For Research Use Only

Granzyme B Polyclonal antibody

Catalog Number: 31521-1-AP



Basic Information

Catalog Number: 31521-1-AP	GenBank Accession Number: BC030195	Purification Method: Antigen affinity Purification
Size: 150ul , Concentration: 900 µg/ml by Nanodrop;	GeneID (NCBI): 3002	Recommended Dilutions: WB 1:2000-1:16000 IHC 1:500-1:2000
Source: Rabbit	UNIPROT ID: P10144	
Isotype: IgG	Full Name: granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1)	
	Calculated MW: 247 aa, 28 kDa	
	Observed MW: 33 kDa	

Applications

Tested Applications: WB, IHC, FC (Intra), ELISA	Positive Controls: WB : NK-92 cells, U-937 cells
Species Specificity: human	IHC : human lymphoma tissue, human tonsillitis tissue

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

GZMB(Granzyme B) is also named as CGL1, CSPB, CTLA1, GRB and belongs to the Granzyme subfamily. This enzyme is necessary for target cell lysis in cell-mediated immune responses. The cytotoxic lymphocyte protease granzyme B (GzmB) can promote apoptosis through direct processing and activation of members of the caspase family. GzmB can also cleave the BH3-only protein, BID, to promote caspase-independent mitochondrial permeabilization (PMID:17283187). GzmB induces laminB degradation in isolated nuclei less efficiently than GzmA (PMID:11331782). This full length protein has 2 glycosylation sites and a signal peptide. Unglycosylated human granzyme B is 26 kDa and high mannose glycosylated is 32 kDa and only 32kDa or smaller forms of granzyme B are accumulated within nuclei (PMID:8626751). GzmB also forms dimers.

Storage

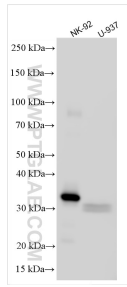
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

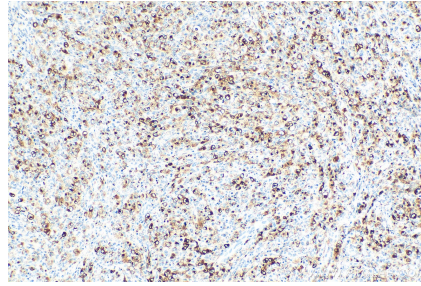
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

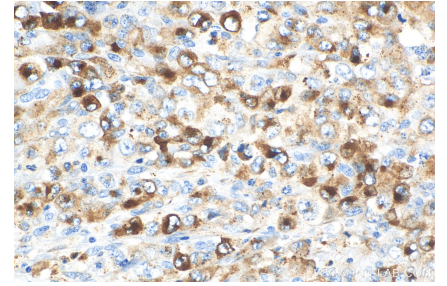
Selected Validation Data



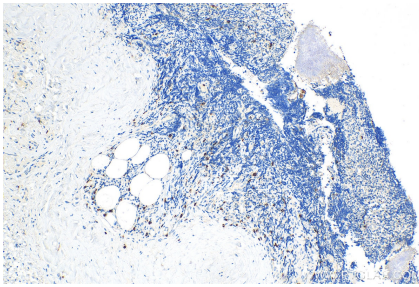
Various lysates were subjected to SDS PAGE followed by western blot with 31521-1-AP (GZMB antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



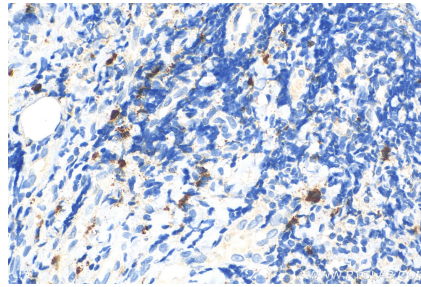
Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 31521-1-AP (Granzyme B antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



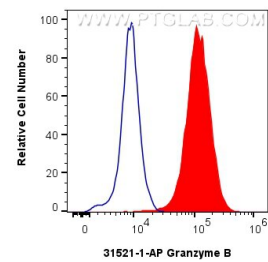
Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 31521-1-AP (Granzyme B antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 31521-1-AP (Granzyme B antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 31521-1-AP (Granzyme B antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1×10^6 NK-92 cells were intracellularly stained with 0.25 μ g Granzyme B Polyclonal antibody (31521-1-AP) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 μ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).