#### For Research Use Only

# Granzyme B Polyclonal antibody

Catalog Number: 13588-1-AP

25 Publications



**Basic Information** 

Catalog Number: 13588-1-AP

GenBank Accession Number: BC030195

**Purification Method:** Antigen affinity purification

GeneID (NCBI):

Recommended Dilutions:

150ul , Concentration: 400  $\mu g/ml$  by Nanodrop:

**UNIPROT ID:** 

WB 1:500-1:2000 IHC 1:50-1:500 IF 1:50-1:500

Rabbit

Isotype:

AG3883

IgG

P10144

Full Name:

granzyme B (granzyme 2, cytotoxic Tlymphocyte-associated serine

Immunogen Catalog Number:

esterase 1)

Calculated MW:

247 aa, 28 kDa

Observed MW:

33 kDa

**Applications** 

**Tested Applications:** 

WB, IF, FC, IHC, ELISA

**Cited Applications:** 

WB. IF. IHC

Species Specificity:

human

**Cited Species:** 

human, mouse

**Positive Controls:** 

WB: HL-60 cells,

IHC: human lymphoma tissue,

IF: HeLa cells,

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.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Haoyu Guo	36201949	Biomaterials	IHC
Lan Zhang	34586738	Clin Transl Med	IHC
Tianxiao Xu	34571002	J Invest Dermatol	IHC

Storage

Store at -20°C. Stable for one year after shipment.

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

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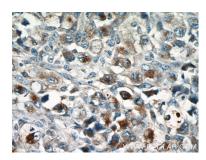
## **Selected Validation Data**



HL-60 cells were subjected to SDS PAGE followed by western blot with 13588-1-AP (GZMB antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours



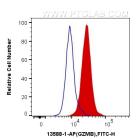
Immunohistochemical analysis of paraffinembedded human lymphoma tissue slide using 13588-1-AP (GZMB antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lymphoma tissue slide using 13588-1-AP (GZMB antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed Hela cells using 13588-1-AP (GZMB antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 NK92 were intracellularly stained with 0.4 ug Anti-Human Granzyme B (13588-1-AP) (red), or 0.4 ug x. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).