For Research Use Only

Granzyme B Polyclonal antibody

Catalog Number:13588-1-AP 40 Publications

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Basic Information

Catalog Number:
13588-1-AP

Size:
150ul , Concentration: 400 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3883

GenBank Accession Number:
BC030195

GeneID (NCBI):
3002

UNIPROT ID:
P10144

Full Name:
granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1)

Calculated MW:
247 aa, 28 kDa

Observed MW:
33 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:50-1:500
IF/ICC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse

Cited Species:
human, mouse, rat

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

Positive Controls:

WB : HL-60 cells,

IHC : human lymphoma tissue, mouse spleen tissue

IF/ICC : HeLa cells,

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

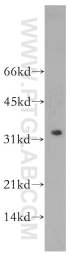
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

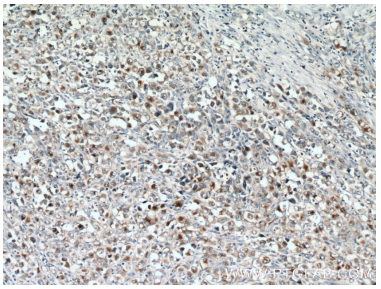
***** 20ul sizes contain 0.1% BSA**

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

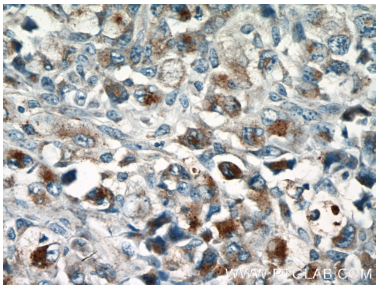
Selected Validation Data



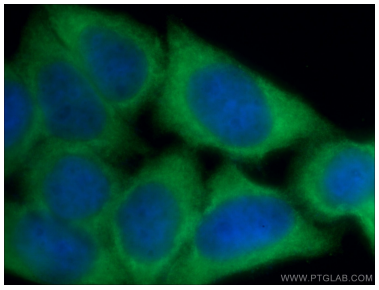
HL-60 cells were subjected to SDS PAGE followed by western blot with 13588-1-AP (GZMB antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



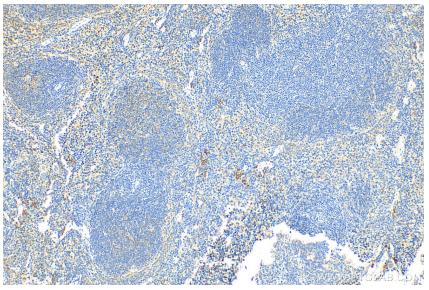
Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 13588-1-AP (GZMB antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



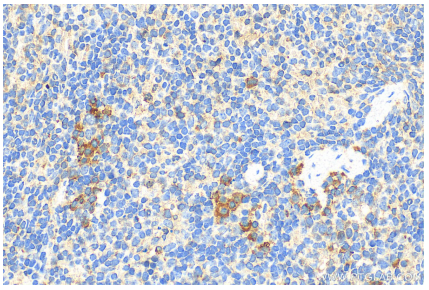
Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 13588-1-AP (GZMB antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 13588-1-AP (Granzyme B antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 13588-1-AP (Granzyme B antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).