# Granzyme B Antibody

Catalog No: #48298

Package Size: #48298-1 50ul #48298-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

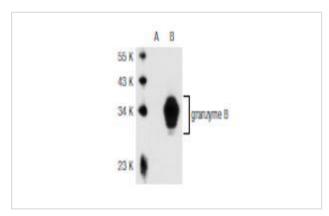
Description	
Product Name	Granzyme B Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	4G9
Purification	ProA affinity purified
Applications	WB, IP, IF, IHC(P)
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Amino acids 1-247 representing full length granzyme B of human origin.
Other Names	C11 antibody Cathepsin G like 1 antibody Cathepsin G-like 1 antibody CCPI antibody CGL 1 antibody CGL1
	antibody CSP B antibody CSPB antibody CTLA-1 antibody CTLA1 antibody CTSGL1 antibody Cytotoxic
	serine protease B antibody Cytotoxic T lymphocyte associated serine esterase 1 antibody Cytotoxic T
	lymphocyte proteinase 2 antibody Cytotoxic T-lymphocyte proteinase 2 antibody Fragmentin 2 antibody
	Fragmentin-2 antibody GRAB_HUMAN antibody Granzyme 2 antibody Granzyme B (granzyme 2, cytotoxic T
	lymphocyte associated serine esterase 1) antibody Granzyme B antibody Granzyme-2 antibody GranzymeB
	antibody GRB antibody Gzmb antibody HIp antibody Human lymphocyte protein antibody Lymphocyte
	protease antibody Protease, serine, B antibody SECT antibody T cell serine protease 1-3E antibody T-cell

	serine protease 1-3E antibody
Accession No.	Swiss-Prot#:P10144
Uniprot	P10144
GeneID	3002;
Calculated MW	32 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

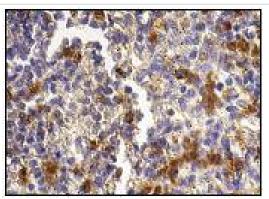
## Application Details

WB: 1:100-1:1,000IHC: 1:50-500IP: 1-2  $\mu g$  per 100-500  $\mu g$  of total protein(1 ml of cell lysate)

## **Images**



Western blot analysis of granzyme B expression in non-transfected(A)and human granzyme B transfected(B)293T whole cell lysates.



Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in red pulp.

### Background

Granzyme A and granzyme B are serine proteases that mediate apoptotic signaling in cytotoxic T lymphocytes (CTL) and natural killer (NK) cells. Both granzyme A and granzyme B are synthesized as inactive proenzymes, and they are stored within cytolytic granules and released by effector cells during degranulation. In activated CTLs, granzyme A and granzyme B are processed and activated by cathepsin C, and they then function to induce apoptosis by two distinct pathways. Granzyme B proteolytically cleaves and activates members of the caspase family of cysteine proteases, including caspase-3, caspase-6, caspase-7 and caspase-9. When cleaved, these caspases assemble into active holoenzymes that then mediate apoptosis through a defined proteolytic cascade involving nuclear lamins and PARP (poly ADP ribose polymerase). Granzyme A mediates the activation of apoptosis by inducing single-strand DNA breaks, membrane perturbation and nuclear condensations in an alternative pathway that is independent from caspase activation or the caspase proteolytic cascade.

#### References

Note: This product is for in vitro research use only