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Granzyme K Polyclonal Antibody

Catalog # AP70234

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P49863
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28882

Additional Information

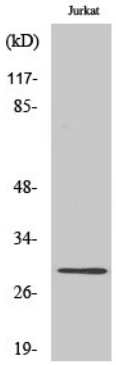
Gene ID	3003
Other Names	GZMK; TRYP2; Granzyme K; Fragmentin-3; Granzyme-3; NK-tryptase-2; NK-Tryp-2
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	GZMK {ECO:0000303|PubMed:39914456, ECO:0000312|HGNC:HGNC:4711}
Function	Serine protease that initiates the GZMK pathway of the complement system, a cascade of proteins directly activated by CD8(+) T-cells that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:3262682, PubMed:39814882, PubMed:39914456). GZMK is specifically secreted by CD8(+) T-cells and mediates both recognition and initiation steps of GZMK complement pathway (PubMed:39914456). First acts as a pattern recognition receptor, which specifically recognizes and binds heparan sulfate glycosaminoglycans on the pathogen surface to drive opsonization (PubMed:39914456). It then initiates the complement pathway cascade by catalyzing cleavage and activation of C2 and C4, the next components of the complement pathway (PubMed:39814882, PubMed:39914456). GZMK-mediated complement activation is an important contributor to tissue inflammation (PubMed:24711407, PubMed:33271118, PubMed:35704599, PubMed:39614076, PubMed:39814882, PubMed:39914456). Also able to cleave and activate F2R/PAR1 and PAR2/F2RL1, possibly promoting interleukin

	release (PubMed:21760880, PubMed:26936634, PubMed:35881628). May also regulate apoptosis by catalyzing cleavage and activation of BID, thereby promoting cytochrome C release from mitochrondria (PubMed:17308307).
Cellular Location	Secreted. Cell surface. Cytoplasmic granule. Note=Constitutively secreted by CD8(+) T-cells in the absence of TCR stimulation (PubMed:39914456) Specifically binds heparan sulfate glycosaminoglycans on the surface of pathogens (PubMed:39914456).
Tissue Location	Specifically expressed by CD8(+) T-cells.

Images



Western Blot analysis of various cells using Granzyme K Polyclonal Antibody diluted at 1：1000

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