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GZMA Antibody (Center K128) Blocking peptide

Synthetic peptide
Catalog # BP11229c

Specification

GZMA Antibody (Center K128) Blocking peptide - Product Information

Primary Accession P12544

GZMA Antibody (Center K128) Blocking peptide - Additional Information

Gene ID 3001

Other Names
Granzyme A, CTL tryptase, Cytotoxic T-lymphocyte proteinase 1, Fragmentin-1, Granzyme-1, Hanukkah factor, H factor, HF, GZMA, CTLA3, HFSP

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GZMA Antibody (Center K128) Blocking peptide - Protein Information

Name GZMA {ECO:0000303|PubMed:32299851, ECO:0000312|HGNC:HGNC:4708}

Function
Abundant protease in the cytosolic granules of cytotoxic T- cells and NK-cells which activates caspase-independent pyroptosis when delivered into the target cell through the immunological synapse (PubMed:3257574, PubMed:3262682, PubMed:3263427, PubMed:32299851, PubMed:12819770). It cleaves after Lys or Arg (PubMed:32299851, PubMed:12819770). Once delivered into the target cell, acts by catalyzing cleavage of gasdermin-B (GSDMB), releasing the pore-forming moiety of GSDMB, thereby triggering pyroptosis and target cell death (PubMed:32299851, PubMed:34022140, PubMed:36157507, PubMed:36899106). Cleaves APEX1 after 'Lys-31' and destroys its oxidative repair activity (PubMed:<a

href="http://www.uniprot.org/citations/12524539" target="_blank">12524539). Cleaves the nucleosome assembly protein SET after 'Lys-189', which disrupts its nucleosome assembly activity and allows the SET complex to translocate into the nucleus to nick and degrade the DNA (PubMed:11555662, PubMed:12628186, PubMed:16818237).

Cellular Location
[Isoform alpha]: Secreted. Cytoplasmic granule. Note=Delivered into the target cell by perforin.

GZMA Antibody (Center K128) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

GZMA Antibody (Center K128) Blocking peptide - Images

GZMA Antibody (Center K128) Blocking peptide - Background

Cytolytic T lymphocytes (CTL) and natural killer (NK)cells share the remarkable ability to recognize, bind, and lysespecific target cells. They are thought to protect their host bylysing cells bearing on their surface 'nonself' antigens, usuallypeptides or proteins resulting from infection by intracellularpathogens. The protein described here is a T cell- and naturalkiller cell-specific serine protease that may function as a commoncomponent necessary for lysis of target cells by cytotoxic Tlymphocytes and natural killer cells.

GZMA Antibody (Center K128) Blocking peptide - References

Schuurhof, A., et al. Pediatr. Pulmonol. 45(6):608-613(2010)Pardo, J., et al. Blood 114 (18), 3968 (2009) :Zhu, P., et al. Blood 114(6):1205-1216(2009)Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)Siezen, C.L., et al. Pediatr. Infect. Dis. J. 28(4):333-335(2009)