

Anti-Granzyme B/H Antibody

Catalog # AP53677

### Specification

# Anti-Granzyme B/H Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IHC <u>P10144</u> <u>P20718</u> Human, Mouse, Rat Rabbit Polyclonal 27716

# Anti-Granzyme B/H Antibody - Additional Information

#### Gene ID 3002

### **Other Names**

GZMB; CGL1; CSPB; CTLA1; GRB; Granzyme B; C11; CTLA-1; Cathepsin G-like 1; CTSGL1; Cytotoxic T-lymphocyte proteinase 2; Lymphocyte protease; Fragmentin-2; Granzyme-2; Human lymphocyte protein; HLP; SECT; T-cell serine protease 1-3E; GZMH; CGL2; CTSGL2; Granzyme H; CCP-X; Cathepsin G-like 2; CTSGL2; Cytotoxic T-lymphocyte proteinase; Cytotoxic serine protease C; CSP-C

#### Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Granzyme B/H. The exact sequence is proprietary.

**Dilution** WB~~1/500 - 1/1000 IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

### Anti-Granzyme B/H Antibody - Protein Information

Name GZMB {ECO:0000303|PubMed:32188940, ECO:0000312|HGNC:HGNC:4709}

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:<a href="http://www.uniprot.org/citations/1985927" target="\_blank">1985927</a>, PubMed:<a href="http://www.uniprot.org/citations/1985927"



target="\_blank">3262682</a>, PubMed:<a href="http://www.uniprot.org/citations/3263427" target=" blank">3263427</a>). It cleaves after Asp (PubMed:<a

href="http://www.uniprot.org/citations/1985927" target="\_blank">1985927</a>, PubMed:<a href="http://www.uniprot.org/citations/8258716" target="\_blank">8258716</a>). Once delivered into the target cell, acts by catalyzing cleavage of gasdermin-E (GSDME), releasing the poreforming moiety of GSDME, thereby triggering pyroptosis and target cell death (PubMed:<a href="http://www.uniprot.org/citations/31953257" target="\_blank">31953257</a>, PubMed:<a href="http://www.uniprot.org/citations/31953257" target="\_blank">32188940</a>). Seems to be linked to an activation cascade of caspases (aspartate-specific cysteine proteases) responsible for apoptosis execution. Cleaves caspase-3, -9 and -10 (CASP3, CASP9 and CASP10, respectively) to give rise to active enzymes mediating apoptosis (PubMed:<a href="http://www.uniprot.org/citations/9852092" target="\_blank">9852092</a>). Cleaves and activates CASP7 in response to bacterial infection, promoting plasma membrane repair (By similarity).

# **Cellular Location**

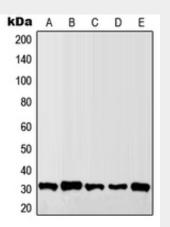
Secreted. Cytolytic granule. Note=Delivered into the target cell by perforin (PubMed:20038786).

# Anti-Granzyme B/H Antibody - Protocols

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

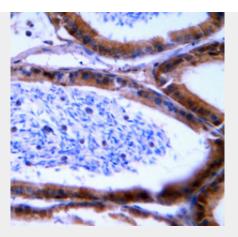
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-Granzyme B/H Antibody - Images



Western blot analysis of Granzyme B/H expression in MCF7 (A), Raw264.7 (B), SP2/0 (C), H9C2 (D), HL60 (E) whole cell lysates.





Immunohistochemical analysis of Granzyme B/H staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

# Anti-Granzyme B/H Antibody - Background

Rabbit polyclonal antibody to Granzyme B/H