

## Mouse anti-Human Granzyme B Monoclonal Antibody | anti-GZMB antibody

Granzyme B (NK/T-Cell Lymphoma Marker)

|                               |                      |                            |                                             |
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| CATALOG #<br><b>AAA215006</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>Immunohistochemistry</b> |
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### PRODUCT SYNONYMS

Granzyme B; Monoclonal Antibody; Granzyme B (NK/T-Cell Lymphoma Marker); Cathepsin G-like 1; CCPI; CGL1; CSPB; CTLA-1; CTSG1; Cytotoxic serine protease B; Cytotoxic T lymphocyte associated serine esterase 1; Cytotoxic T-lymphocyte proteinase 2; Fragmentin-2; GRB; Human lymphocyte protein (Hlp); Lymphocyte protease; SECT; T-cell serine protease 1-3E; anti-GZMB antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| Host                                           | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Isotype                                        | IgG, kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Clone Number                                   | GZMB/3055                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Specificity                                    | Granzyme B is a member of the granule serine protease family stored specifically in NK cells or cytotoxic T cells. Cytolytic T lymphocytes (CTL) and natural killer (NK) cells share the ability to recognize, bind, and lyse specific target cells. They are thought to protect their host by lysing cells bearing on their surface 'nonself' antigens, usually peptides or proteins resulting from infection by intracellular pathogens. Granzyme B is crucial for the rapid induction of target cell apoptosis by CTLs in the cell-mediated immune response. Granzyme B is useful as a marker in the identification of NK/T-cell lymphomas. High percentages of cytotoxic T-cells have been shown to be an unfavorable prognostic indicator in Hodgkin's Disease. |
| Purity/Purification                            | Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Form/Format                                    | 200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Sequence Length                                | 247                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Applicable Applications for anti-GZMB antibody | IHC (Immunohistochemistry)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Positive Control                               | A431 cells. Human tonsil, spleen or Hodgkin's Lymphoma tissue (IHC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Immunogen                                      | Recombinant fragment of human GZMB protein (around aa 73-187) (exact sequence is proprietary)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Cellular Localization                          | Cytoplasmic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Hu-chromosome Location                         | 14q11.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Preparation and Storage                        | Antibody with azide: store at 2 to 8 degree C.<br>Antibody without azide: store at -20 to -80 degree C.<br>Antibody is stable for 24 months. Non-hazardous. No MSDS required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

IMAGES



Application Data

Analysis of Protein Array containing >19,000 full-length human proteins using Granzyme B Monospecific Mouse Monoclonal Antibody (GZMB/3055) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SDs) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Spleen stained with Granzyme B Monospecific Mouse Monoclonal Antibody (GZMB/3055).



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Formalin-fixed, paraffin-embedded human Spleen stained with Granzyme B Monospecific Mouse Monoclonal Antibody (GZMB/3055).

ADDITIONAL INFORMATION

|            |                                                                                                                                                                                                                |
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| References | Shrestha, S., et al. 1995. Natural killer and lymphokine-activated killer cells require granzyme B for the rapid induction of apoptosis in susceptible target cells. Proc. Natl. Acad. Sci. USA 92: 5679-5683. |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                              |
|----------------------------------|--------------------------------------------------------------|
| NCBI GI #                        | 221625528                                                    |
| NCBI GeneID                      | 3002                                                         |
| NCBI Accession #                 | NP_004122.2                                                  |
| NCBI GenBank Nucleotide #        | NP_004122.2                                                  |
| UniProt Accession #              | P10144                                                       |
| Molecular Weight                 | 29-32kDa                                                     |
| NCBI Official Full Name          | granzyme B isoform 1 preproprotein                           |
| NCBI Official Synonym Full Names | granzyme B                                                   |
| NCBI Official Symbol             | GZMB                                                         |
| NCBI Official Synonym Symbols    | C11; HLP; CCPI; CGL1; CSPB; SECT; CGL-1; CSP-B; CTLA1; CTSG1 |
| NCBI Protein Information         | granzyme B                                                   |
| UniProt Protein Name             | Granzyme B                                                   |
| UniProt Gene Name                | GZMB                                                         |
| UniProt Synonym Gene Names       | CGL1; CSPB; CTLA1; GRB; CTSG1; Lymphocyte protease; HLP      |
| UniProt Entry Name               | GRAB_HUMAN                                                   |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/granzyme-b-antibody-clone-gzmb-3055-immunohistochemistry-elisa/215006>