

## 36-2451: Anti-Granzyme B (NK/T-Cell Lymphoma Marker) Monoclonal Antibody(Clone: GZMB/3055)

|                                |                                                                                                                                                                                                                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clonality :</b>             | Monoclonal                                                                                                                                                                                                                                                                            |
| <b>Clone Name :</b>            | GZMB/3055                                                                                                                                                                                                                                                                             |
| <b>Application :</b>           | IHC                                                                                                                                                                                                                                                                                   |
| <b>Reactivity :</b>            | Human                                                                                                                                                                                                                                                                                 |
| <b>Gene :</b>                  | GZMB                                                                                                                                                                                                                                                                                  |
| <b>Gene ID :</b>               | 3002                                                                                                                                                                                                                                                                                  |
| <b>Uniprot ID :</b>            | P10144                                                                                                                                                                                                                                                                                |
| <b>Alternative Name :</b>      | 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 |
| <b>Isotype :</b>               | Mouse IgG, kappa                                                                                                                                                                                                                                                                      |
| <b>Immunogen Information :</b> | Recombinant fragment of human GZMB protein (around aa 73-187) (exact sequence is proprietary)                                                                                                                                                                                         |

### Description

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.

### Product Info

|                            |                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Amount :</b>            | 20 µg / 100 µg                                                                                                                                                          |
| <b>Content :</b>           | 200 µg/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. |
| <b>Storage condition :</b> | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.                               |

### Application Note

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

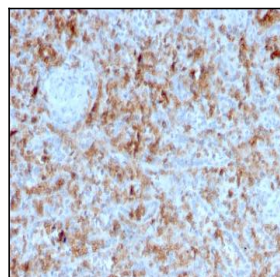


Fig. 1: Formalin-fixed, paraffin-embedded human Spleen stained with Granzyme B Monospecific Mouse Monoclonal Antibody (GZMB/3055).

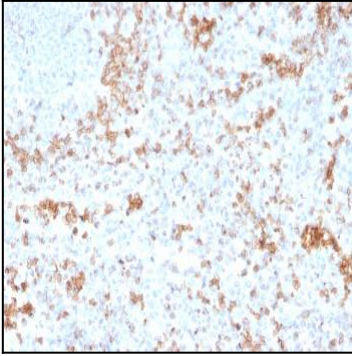


Fig. 2: Formalin-fixed, paraffin-embedded human Spleen stained with Granzyme B Monospecific Mouse Monoclonal Antibody (GZMB/3055).

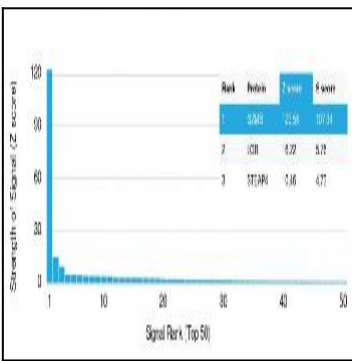


Fig. 3: Analysis of Protein Array containing >19,000 full-length human proteins using Granzyme B Monospecific Mouse Monoclonal Antibody (GZMB/3055) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary 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.