



### Cat nr AE00276

## **Product Datasheet**

Mouse Monoclonal Antibody, clone GZMB/3014 to:

# **Granzyme B, GZMB**

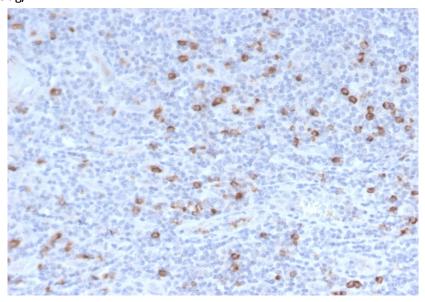
Cathepsin G-like 1; Cytotoxic T-lymphocyte proteinase 2; Lymphocyte protease; Fragmentin-2; Granzyme-2; Human lymphocyte protein; T-cell serine protease 1-3E; C11; CCPI; CGL-1; CGL1; CSP-B; CSPB; CTSGL1; HLP; SECT

Cellular localization	Cytoplasmic granules
Official Symbol (Gene) GeneID SwissProt	GZMB 3002 P10144
Confirmed Applications Positive controls	IHC, PA, WB tonsil, spleen, Hodgkin's Lymphoma (HL)
Aeonian Rating©	81
Purification Formulation  Amount Isotype	By Protein A from bioreactor concentrate  200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug)  1mg IgG/ml in PBS (100ug or contact us for quotation)  20ug  100ug  Mouse IgG2b, kappa
Confirmed species reactivity	Human
Immunogen	Recombinant fragment around aa 73-187 of human Granzyme B
Epitope	protein (exact sequence is proprietary) Within aa 73-187 region
Storage instructions	Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.
Expiration	Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.
Warranty	This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.
Liability	This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.
Product performance	see next pages

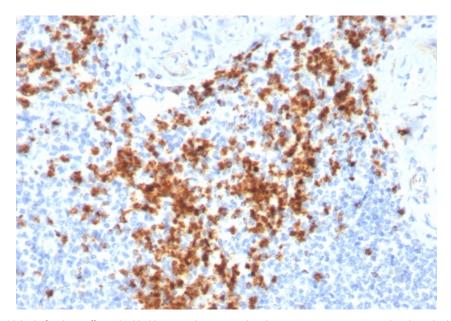
#### **Product data:**

ImmunoHistoChemistry (IHC):

This product shows staining of select leukocytes in human tonsil and spleen sections. Recommended concentration: 1-3 ug/ml



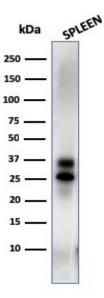
Formaldehyde-fixed, paraffin-embedded human tonsil stained with Granzyme B Mouse Monoclonal Antibody AE00276 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.



Formaldehyde-fixed, paraffin-embedded human spleen stained with Granzyme B Mouse Monoclonal Antibody AE00276 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

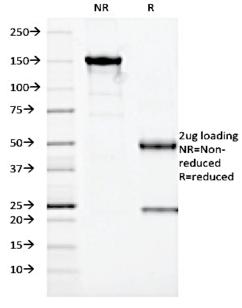
### Western Blot (WB):

This product was successfully used to stain approx. 26+35kDa bands in human spleen lysates. Recommended concentration: 1-3ug/ml



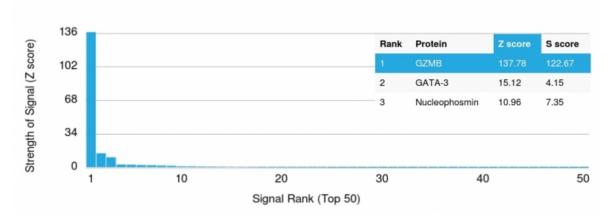
Western Blot of human spleen lysate (30ug) stained with Granzyme B Mouse Monoclonal Antibody AE00276 at 1-2ug/ml (1h at ambient temp). ECL staining by HRP.

SDS-PAGE Analysis of Purified Granzyme B Mouse Monoclonal Antibody AE00276. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00276 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 50kDa and 25kDa resp. (R).

Specificity and selectivity of AE00276 to Granzyme B were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against H. sapiens revealed the following closely related proteins: GZMH and CTSG. These proteins were part of the array used and showed no cross-reactivity signals.



Cross-reactivity assessment of Granzyme B Mouse Monoclonal Antibody AE00276 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins.

The Z-score represents the strength of a signal that an antibody (through a fluorophore-tagged secondary reagent) produces when binding to a particular protein on the array. Z-scores are in units of standard deviations (SD's) above the mean value of all signals generated on that array. When Z-scores are arranged in descending order, the difference between two successive values will be the S-score for the first. Thus, the S-score represents the relative specificity of the antibody to its intended target. An antibody is considered specific to its intended target, when it has an S-score of at least 2.5. For example, if an antibody binds to intended protein X with a Z-score of 43 and to the cross-reacting protein Y with a next Z-score of 14, then the S-score for the antibody to intended target X equals 29 (43-14).