



Cat nr AE00240

Product Datasheet

Mouse Monoclonal Antibody, clone ZAP70/2035 to:

ZAP70

70kDa zeta-chain associated protein; Syk-related tyrosine kinase; Tyrosine-protein kinase ZAP-70; Zeta chain of T cell receptor Associated Protein kinase 70; ADMIO2; IMD48;; SRK; STCD; STD; TZK; ZAP-70

Cellular localization	Cytoplasm, transported to the plasma membrane upon TCR activation
Official Symbol (Gene)	ZAP70
GenelD	7535
SwissProt	P43403

Confirmed Applications	ICC, IHC, PA
Positive controls	Tonsil, lymph node, Jurkat
Aeonian Rating©	82

Purification	By Protein G from bioreactor concentrate
Formulation	<input type="checkbox"/> 200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug) <input type="checkbox"/> 1mg IgG/ml in PBS (100ug or contact us for quotation)
Amount	<input type="checkbox"/> 20ug <input type="checkbox"/> 100ug
Isotype	Mouse IgG1, kappa
Confirmed species reactivity	Human
Immunogen	Recombinant fraction of aa 247-382 of human ZAP70 (exact sequence is proprietary)
Epitope	Within aa 247-382 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.

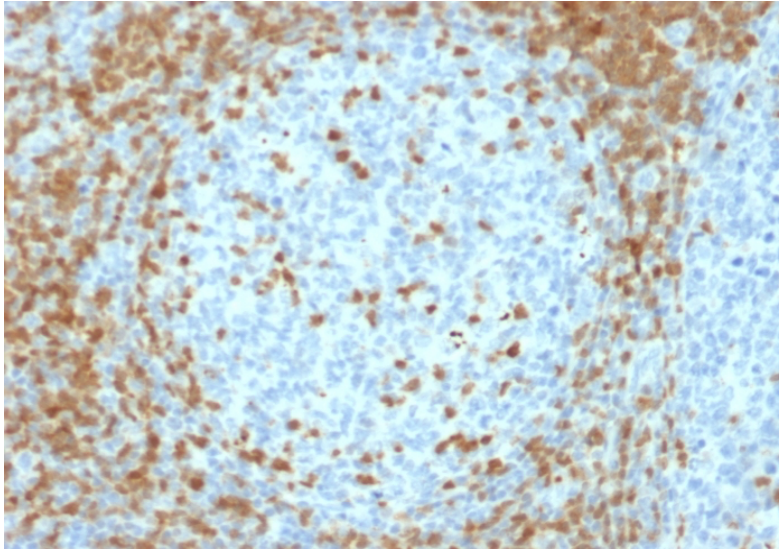
Product performance see next pages

Product data:

ImmunoHistoChemistry (IHC):

This product shows staining of T-cells mainly outside the Germinal Centres in human tonsil sections.

Recommended concentration: 1-3ug/ml

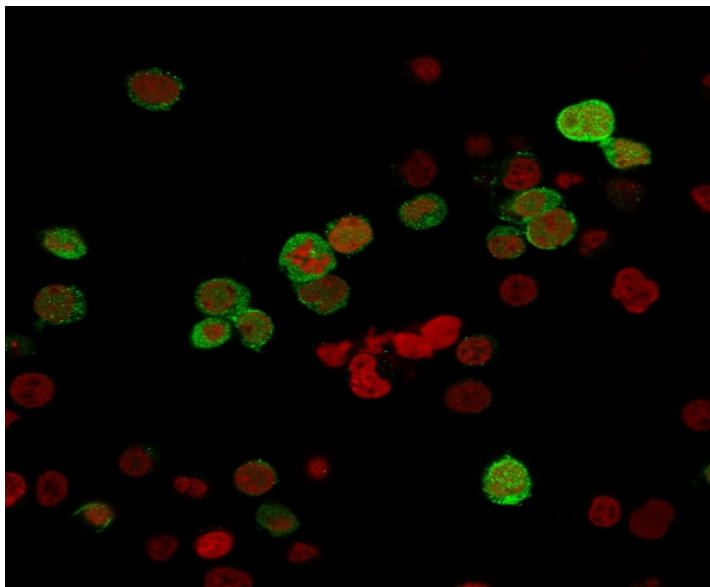


Formaldehyde-fixed, paraffin-embedded human prostate carcinoma stained with ZAP70 Mouse Monoclonal Antibody AE00237 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

Immunocytochemistry (ICC):

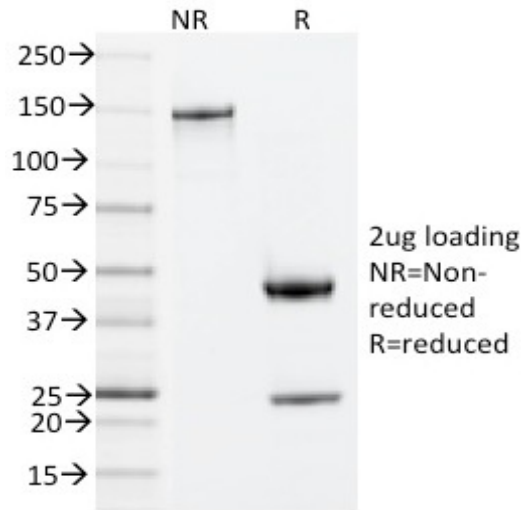
This product was successfully used to stain cytoplasm in cell line Jurkat. Recommended concentration: 1-

3ug/ml



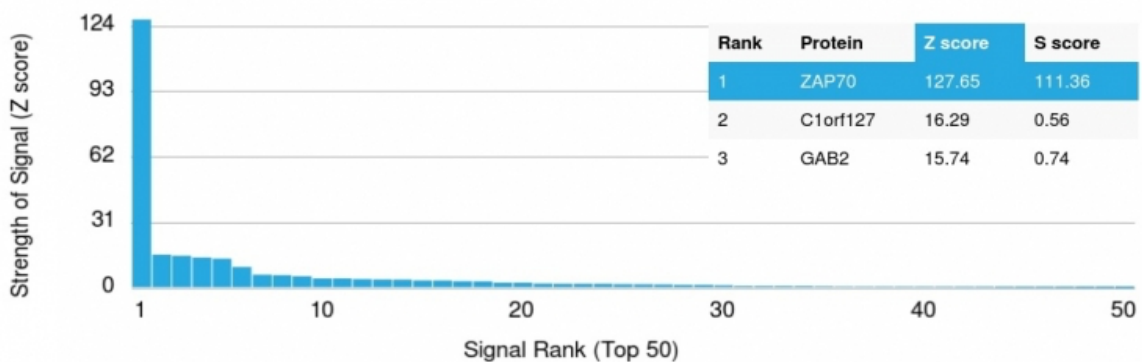
Confocal microscopy of cell line Jurkat stained with ZAP70 Mouse Monoclonal Antibody AE00240 at 1-2ug/ml (1h at ambient temp). CF488 (green) staining of the antibody and RedDot (red) for nuclear staining.

SDS-PAGE Analysis of Purified ZAP70 Mouse Monoclonal Antibody AE00240. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00240 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 50kDa and 24kDa resp. (R).

Specificity and selectivity of AE00240 to ZAP70 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against *H. sapiens* revealed closely related protein SYK. This protein was part of the array used and showed no cross-reactivity signals.



Cross-reactivity assessment of ZAP70 Mouse Monoclonal Antibody AE00240 (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).