

36-3383: Anti-ZAP70 (Chronic Lymphocytic Leukemia Marker) Monoclonal Antibody(Clone: ZAP70/2047)

Clonality :	Monoclonal
Clone Name :	ZAP70/2047
Application :	ELISA, FACS, IF, IHC
Reactivity :	Human
Gene :	ZAP70
Gene ID :	7535
Uniprot ID :	P43403
Alternative Name :	Selective T cell defect; SRK; STD; Syk-related tyrosine kinase; Tyrosine-protein kinase ZAP-70; TZK; Zeta chain associated protein kinase 70kDa
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant fragment (around aa 247-382) of human ZAP70 protein (exact sequence is proprietary)

Description

ZAP70 is a 70kDa protein tyrosine kinase found in T-cells and natural killer cells. Control of this protein translation is via the IgVH gene. ZAP70 protein is expressed in leukemic cells of approximately 25% of chronic lymphocytic leukemia (CLL) cases as well. Anti-ZAP70 expression is an excellent surrogate marker for the distinction between the Ig-mutated (anti-ZAP70 negative) and Ig-unmutated (anti-ZAP70 positive) CLL subtypes and can identify patient groups with divergent clinical courses. The anti-ZAP70 positive Ig-unmutated CLL cases have been shown to have a poorer prognosis.

Product Info

Amount :	20 µg / 100 µg
Content :	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.
Storage condition :	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

ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA); Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); 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);

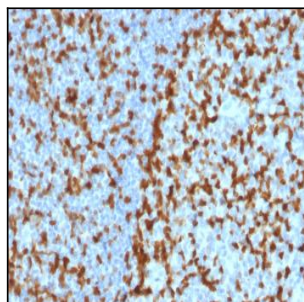


Fig. 1: Formalin-fixed, paraffin-embedded human Tonsil stained with ZAP70 Mouse Monoclonal Antibody (ZAP70/2047).

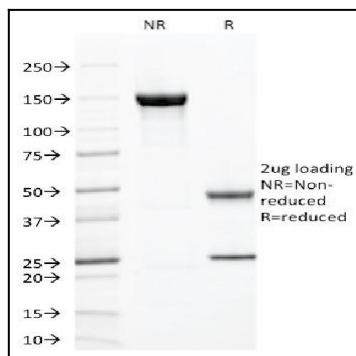


Fig. 2: SDS-PAGE Analysis Purified ZAP70 Mouse Monoclonal Antibody (ZAP70/2047). Confirmation of Integrity and Purity of Antibody.

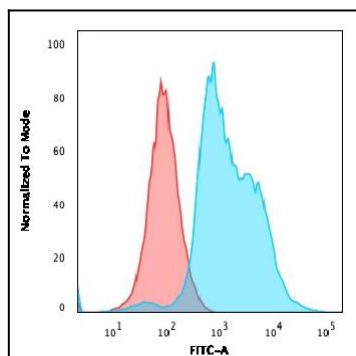


Fig. 3: Flow Cytometric Analysis of PFA-fixed Jurkat cells. ZAP70 Mouse Monoclonal Antibody (ZAP70/2047) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

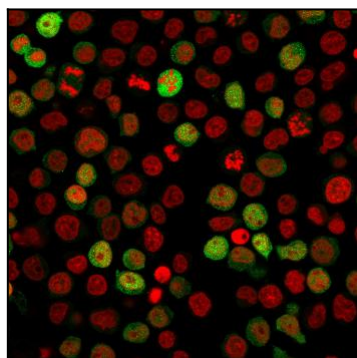


Fig. 4: Immunofluorescence staining of paraformaldehyde-fixed Jurkat cells with ZAP70 Mouse Monoclonal Antibody (ZAP70/2047) followed by goat anti-Mouse IgG-CF488 (Green). Nuclei are labeled with Reddot (Red).

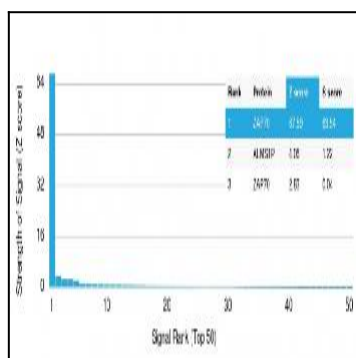


Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using ZAP70 Mouse Monoclonal Antibody (ZAP70/2047). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) 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.