



Qty: 100 µg/200 µL

Mouse anti-ZAP-70

Catalog No. 37-6500

Lot No.

Mouse anti-ZAP-70

FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: 1E7.2

ISOTYPE: Mouse IgG₁-kappa

IMMUNOGEN

Synthetic peptide derived from the region between the second SH2 domain and the kinase domain of human ZAP-70 (zeta-associated protein of 70 kDa)

SPECIFICITY

This antibody is specific for the ~70 kDa ZAP-70 protein.

REACTIVITY

Reactivity has been confirmed with human Jurkat cells and mouse thymocytes.

Sample	ELISA	FACS ¹	Immunoprecipitation ²	Western Blotting
Human	ND	+++	ND	+++
Mouse ²	ND	ND	+++	+++

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

FACS¹: 0.5-2.0 µg/mL
Western Blotting: 1-5 µg/mL
Immunoprecipitation²: 10 µg/reaction
ELISA: 0.1-1.0 µg/mL

Note: For information on FACS applications, please see reference #1 (Rassenti LZ, et al. *N Engl J Med* 351(9):893-901, 2004.)

Note: For information on immunoprecipitation applications, please see reference #2 (Qian D, et al. *J Exp Med* 185(7):1253-1259, 1997.)

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

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PI376500

(Rev 10/08) DCC-08-1089

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BACKGROUND

ζ -associated protein-70 (ZAP-70) is a member of the Syk family of protein tyrosine kinases. ZAP-70 is normally expressed in T cells and natural killer (NK) cells and is critical for signal transduction.² ZAP-70 mutations result in T-cell immunodeficiency and failure of B-cell development.³ It has been reported that the expression of ZAP-70 in B-chronic lymphocytic leukemia (B-CLL) correlated with *IgV_H* mutational status, disease progression, and survival. The expression of ZAP-70 may thus serve as a prognostic marker for B-CLL.⁴⁻⁵

A recent study used ZAP-70 clone 1E7.2 to show that ZAP-70 is a stronger predictor of the need for treatment in B-cell CLL than the presence of an unmutated *IgV_H* gene.¹

REFERENCES

1. Rassenti LZ, et al. *N Engl J Med* 351(9):893-901, 2004.
2. Qian D, et al. *J Exp Med* 185(7):1253-1259, 1997.
3. Colucci F, et al. *Nature Immun* 3:288-294, 2002.
4. Crespo M, et al. *N Engl J Med* 348(18):1764-1775, 2003.
5. Wiestner A, et al. *Blood* 101(12):4944-4951, 2003.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose [®] 4B	10-1241

Conjugate	ZyMAX[™] Goat x Rabbit IgG (H+L)	ZyMAX[™] Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy [™] 3	81-6115	81-6515
Cy [™] 5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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