Zap-70 Monoclonal Antibody (1E7.2), FITC, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	1E7.2
Conjugate	FITC
Excitation/Emission Max	498/517 nm
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_465367

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	1 Publication

Product Specific Information

Description: The 1E7.2 antibody reacts with human and mouse ZAP-70, the TCR-associated protein-70. ZAP-70 is a cytosolic protein tyrosine kinase (PTK) and a member of the Syk family of proteins. It is expressed in T and NK cells and is required for TCR signaling and development. ZAP-70 interacts with the TCR complex by binding to tyrosine-phosphorylated immunoreceptor tyrosine-based activation motifs (ITAMs) present in the invariant subunits of the TCR complex. Following activation, ZAP-70 is phosphorylated on several tyrosine residues by two mechanisms; an autophosphorylation and a transphosphorylation by the Src family tyrosine kinase Lck1-3. Tyrosine phosphorylation of ZAP-70 correlates to its increased kinase activity and triggers downstream signaling events. Mutations in ZAP-70 have been shown to result in a form of Severe Combined Immunodeficiency Syndrome (SCID) in humans. 1E7.2 was generated against a KLH-peptide sequence corresponding to the human ZAP-70 amino acid residues 282-307. While ZAP-70 is normally expressed in T and NK cells, several recent studies have also shown high correlation of ZAP-70 positive expression with mutated IgVH expression in B-chronic lymphocytic leukemia (CCL). In conclusion, the expression of ZAP-70, which can be measured by intracellular flow cytometry, may serve as a prognostic marker for B-CLL.

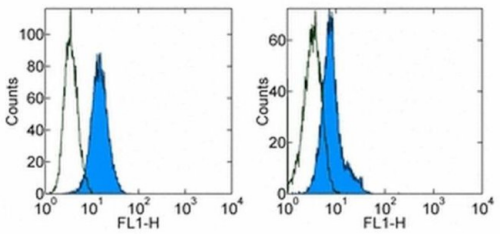
Applications Reported: The 1E7.2 antibody has been reported for use in intracellular flow cytometric analysis.

Applications Tested: This 1E7.2 antibody has been tested by intracellular flow cytometric analysis of mouse thymocytes and human Jurkat cells using the Foxp3/Transcription Factor Buffer Set (cat. 00-5523) and protocol. Please refer to Best Protocols: Protocol B: One step protocol for (nuclear) intracellular proteins. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Zap-70 Monoclonal Antibody (1E7.2), FITC, eBioscience™



Zap-70 Antibody (11-6695-82) in Flow
Intracellular staining of fixed and permeabilized Jurkat cell line (left) or C57BL/6 thymocytes (right) with Mouse IgG1 kappa Isotype Control FITC (Product # 11-4714-42) (open histogram) or Anti-Human/Mouse ZAP-70 FITC (filled histogram). Total cells were used for analysis.

1 Reference

Flow Cytometry (1)

Nature communications

NFAT2 is a critical regulator of the anergic phenotype in chronic lymphocytic leukaemia.

"11-6695-82 was used in Flow cytometry/Cell sorting to identify NFAT2 as a crucial regulator of the anergic phenotype in chronic lymphocytic leukaemia."

Authors: Märklin M,Heitmann JS,Fuchs AR,Truckenmüller FM,Gutknecht M,Bugl S,Saur SJ,Lazarus J,Kohlhofer U, Quintanilla-Martinez L,Rammensee HG,Salih HR,Kopp HG,Haap M,Kirschniak A,Kanz L,Rao A,Wirths S,Müller MR

Year
2017

Species
Mouse