Purified Mouse Anti-human ZAP70 Antibody *ZAP-03, monoclonal*

Catalog number: V1032460
Unit size: 0.1 mg

Product Details

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	Lot specific (please consult certificate of analysis for given lot)
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 15 mM sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Immunogen	ZAP70
Clone	ZAP-03

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with under optimal conditions
Application	FC, WB, ICC

Applications

Tyrosine-protein kinase ZAP-70 (sometimes referred to as Syk-related tyrosine kinase) is a protein with a molecular weight of 70 kDa, found in the cell-cell junction, cytoplasm and T cell receptor complex of cells. In humans, tyrosine-protein kinase ZAP-70 plays an important role in organismal processes, namely, adaptive immune response, protein phosphorylation and T cell differentiation. It has been closely linked to key functions like non-membrane spanning protein tyrosine kinase. Sequencing of tyrosine-protein kinase ZAP-70 has supported it contains 3 types of conserved structural units: SH2 1, SH2 2 and protein kinase domain. Tyrosine-protein kinase ZAP-70 takes part in processes such as cell population proliferation. It recognizes phosphotyrosine residue, ATP and signaling receptor. Tyrosine-protein kinase ZAP-70 acts to positively regulate calcium-mediated signaling, α-beta T cell differentiation and α-beta T cell proliferation. It is the subject of intensive research in part because it is involved with the T cell receptor signaling pathway and transmembrane receptor protein tyrosine kinase signaling pathway. Mutations and abnormalities in tyrosine-protein kinase ZAP-70 have been thought to be involved with a number of diseases, in particular, immunodeficiency 48 (IMD48) and autoimmune disease, multisystem, infantile-onset, 2 (ADMIO2). Immunodeficiency 48, an autosomal recessive inheritancedisorder characterized by eczema, recurrent candida infections and pneumonia, has especially been of interest to researchers.