Immunotag™ ZAP-70 Polyclonal Antibody

Antibody Specification

Catalog No.	ITT4932
Product Description	Immunotag™ ZAP-70 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	ZAP-70
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human ZAP-70. AA range:258-307
Specificity	ZAP-70 Polyclonal Antibody detects endogenous levels of ZAP-70 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	ZAP70
Accession No.	P43403 P43404
Alternate Names	ZAP70; SRK; Tyrosine-protein kinase ZAP-70; 70 kDa zeta-chain associated protein; Syk-related tyrosine kinase

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Description	zeta chain of T cell receptor associated protein kinase 70(ZAP70) Homo sapiens This gene encodes an enzyme belonging to the protein tyrosine kinase family, and it plays a role in T-cell development and lymphocyte activation. This enzyme, which is phosphorylated on tyrosine residues upon T-cell antigen receptor (TCR) stimulation, functions in the initial step of TCR-mediated signal transduction in combination with the Src family kinases, Lck and Fyn. This enzyme is also essential for thymocyte development. Mutations in this gene cause selective T-cell defect, a severe combined immunodeficiency disease characterized by a selective absence of CD8-positive T-cells. Two transcript variants that encode different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Natural killer cell mediated cytotoxicity,T_Cell_Receptor,Primary immunodeficiency,
Protein Expression	Blood,Brain,Leukocyte,Lymphoid,T-cell,
Subcellular Localization	immunological synapse,cytoplasm,cytosol,plasma membrane,cell-cell junction,extrinsic component of cytoplasmic side of plasma membrane,T cell receptor complex,membrane raft,
Protein Function	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,disease:Defects in ZAP70 are the cause of selective T-cell defect (STD) [MIM:176947]. STD is an autosomal recessive form of severe combined immunodeficiency characterized by a selective absence of CD8-type T-cells.,domain:The SH2 domain binds to the phosphorylated tyrosine-based activation motif (TAM) of CD3Z.,function:Plays a role in T-cell development and lymphocyte activation. Essential for TCR-mediated IL-2 production. Isoform 1 induces TCR-mediated signal transduction, isoform 2 does not.,online information:ZAP70 mutation db,PTM:Phosphorylated on tyrosine residues upon T-cell antigen receptor (TCR) stimulation. Tyr-319 phosphorylation is essential for full activity.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 SH2 domains.,subcellular location:After antigen stimulation, isoform 1 concentrates at the immunological synapse and isoform 2 remains cytoplasmic.,subunit:Interacts with SLA2 when it is phosphorylated. Interacts with CD3Z and with phosphorylated NFAM1. Interacts with CBLB (By similarity). Interacts with CBL and SLA when it is phosphorylated. The association with SLA (or SLA2) and CBL probably leads to its destruction. Interacts with SHB. Interacts with DEF6 (By similarity). Interacts with FCRL3.,tissue specificity:Expressed in T- and natural killer cells.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.