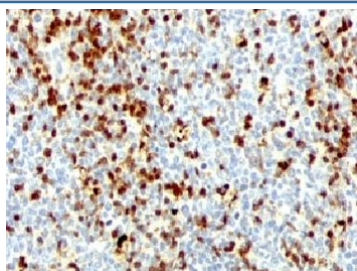


ZAP-70 Antibody [clone ZTP70-1] (V7156)

Catalog No.	Formulation	Size
V7156-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7156-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7156SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7156IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	ZTP70-1
Purity	Protein G affinity chromatography
UniProt	P43403
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT (1) Prediluted IHC Only Format : incubate for 30 min at RT (2)
Limitations	This ZAP-70 antibody is available for research use only.



IHC testing of FFPE human tonsil with ZAP-70 antibody (clone ZTP70-1).

Description

Tyrosine-protein kinase ZAP70 is a tyrosine kinase that plays an essential role in regulation of the adaptive immune response. Regulates motility, adhesion and cytokine expression of mature T-cells, as well as thymocyte development. Contributes also to the development and activation of primary B-lymphocytes. When antigen presenting cells (APC) activate T-cell receptor (TCR), a series of phosphorylations lead to the recruitment of ZAP70 to the doubly phosphorylated TCR component CD247/CD3Z through ITAM motif at the plasma membrane. This recruitment serves to localization to the stimulated TCR and to relieve its autoinhibited conformation. Release of ZAP70 active conformation is further stabilized by phosphorylation mediated by LCK. Subsequently, it phosphorylates at least 2 essential adapter proteins: LAT and LCP2. In turn, a large number of signaling molecules are recruited and ultimately lead to lymphokine production, T-cell proliferation and differentiation. Furthermore, ZAP70 controls cytoskeleton modifications, adhesion and mobility of T-lymphocytes, thus ensuring correct delivery of effectors to the APC. [UniProt]

Application Notes

Titering of the ZAP-70 antibody may be required for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9, for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full-length human protein was used as the immunogen for the ZAP-70 antibody.

Storage

Store the ZAP-70 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).