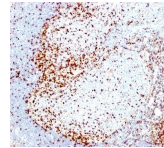


ZAP70 Monoclonal Mouse Antibody (2F3.2)



Product Description

ZAP70 is a 70 kDa protein tyrosine kinase found in T-cells and natural killer cells. Control of this protein translation is via the IgVH gene. In Western blotting of whole cell lysates of normal peripheral blood mononuclear cells, the antibody labels a band corresponding to ZAP70. In Western blotting of whole cell lysates of CD19-positive purified leukemia cells from patients with Ig-unmutated and Ig-mutated CLL, the antibody labels a band corresponding to ZAP70 in the Ig-unmutated CLL samples, whereas no band is observed in the Ig-mutated CLL samples. In Western blotting of cell lysates of Jurkat cells (T-lymphoblastic cell line), the antibody labels a band of 70 kDa protein. In Western blotting of cell lysates of A431 cells (carcinoma cell line), no band is observed. ZAP70 protein is expressed in leukemic cells of approximately 25% of chronic lymphocytic leukemia (CLL) cases as well. Anti-ZAP70 expression is an excellent surrogate marker for the distinction between the Ig-mutated (anti-ZAP70 negative) and Ig-unmutated (anti-ZAP70 positive) CLL subtypes and can identify patient groups with divergent clinical courses. The anti-ZAP70 positive Ig-unmutated CLL cases have been shown to have a poorer prognosis.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0811, Anti-ZAP70 (2F3.2)

Product attributes

| | |
|--------------------------------|--|
| Antibody number | #0811 |
| Antibody reactivity (target) | ZAP70 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | 2F3.2 |
| Isotype | IgG2a, kappa |
| Molecular weight | 70 kDa |
| Synonyms | Selective T cell defect; SRK; STD; Syk-related tyrosine kinase; Tyrosine-protein kinase ZAP-70; TZK; Zeta chain associated protein kinase 70kDa |
| Human gene symbol | ZAP70 |
| Entrez gene ID | 7535 |
| SwissProt | P43403 |
| Unigene | 234569 |
| Immunogen | Recombinant ZAP-70 protein including residues 1-254 and encompassing SH2 domains of human ZAP70 |
| Antibody target cellular | Cytoplasmic |
| Verified antibody applications | Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified) |
| Species reactivity | Human |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user |
| Positive control | Jurkat cells. Tonsil or lymph node. |
| Shipping condition | Room temperature |
| Storage Conditions | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Regulatory status | For research use only (RUO) |
| Antibody/conjugate formulation | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide |
| Antibody research areas | Immunology |
| Cell/tissue expression | Lymphocytes, NK cells, T-cells |
| Tumor expression | Leukemia/lymphoma |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNCB | Biotin | N/A | N/A | N/A | |
| BNUB | Purified | N/A | N/A | N/A | |
| BNUM | Purified, BSA-free | N/A | N/A | N/A | |

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