

# ALK / CD246 Monoclonal Mouse Antibody (ALK/1503)

## Product Description

The wild-type anaplastic lymphoma kinase (ALK) protein is a 200 kDa transmembrane receptor tyrosine kinase. Its expression is restricted to a few scattered cells in the nervous system (some glial cells and neurons, and a few endothelial cells and pericytes). ALK has been found to be rearranged, mutated, or amplified in a series of tumors. The hybrid gene, NPM-ALK, created by the t(2;5)(p23;q35) chromosomal translocation, encodes part of the nucleolar phosphoprotein nucleophosmin (NPM), joined to the entire cytoplasmic portion of ALK. As a consequence, the ALK gene comes under the control of the NPM promoter, which induces a permanent and ubiquitous transcription of the NPM-ALK hybrid gene, resulting in the production of a 80 kDa NPM-ALK chimeric protein. This translocation is found in anaplastic large cell lymphomas (ALCL). Reportedly, expression of ALK indicates a better prognosis. Approximately 5%-10% of non-small cell lung carcinomas also express ALK protein, producing a cytoplasmic staining pattern. This MAb also reacts with blood vessels that serves as an internal positive control.

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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 1503, Anti-ALK (ALK/1503)**

## Product attributes

|                                       |  |
|---------------------------------------|--|
| Antibody number                       | #1503  |
| research-areas                        | Cancer, Neuroscience, Signal transduction  |
| Antibody reactivity (target)          | ALK, CD246   |
| Antibody type                         | Primary  |
| Host species                          | Mouse  |
| Clonality                             | Monoclonal   |
| Clone                                 | ALK/1503   |
| Isotype                               | IgG1, kappa  |
| Molecular weight                      | 80 kDa (hybrid); 200 kDa (wild type)   |
| Synonyms                              | ALK Tyrosine Kinase Receptor; Anaplastic Lymphoma Kinase; ALK/NPM1 fusion gene   |
| Human gene symbol                     | ALK  |
| Entrez gene ID                        | 238  |
| SwissProt                             | Q9UM73   |
| Unigene                               | 654469   |
| Immunogen                             | Recombinant human ALK protein fragment (aa1360-1460) (exact sequence is proprietary)   |
| Verified antibody applications        | WB (verified)  |
| Antibody target cellular localization | Plasma membrane  |
| 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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user |
| Positive control                      | Anaplastic Large Cell Lymphoma   |
| 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               | Cancer, Neuroscience, Signal transduction  |
| Product origin                        | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.  |
| 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 | <a href="#">CF®405S Features</a> |
| BNC88             | CF®488A            | 490/515    | 488        | GFP, FITC                | <a href="#">CF®488A Features</a> |
| BNC68             | CF®568             | 562/583    | 532, 561   | RFP, TRITC               | <a href="#">CF®568 Features</a>  |
| BNC94             | CF®594             | 593/614    | 561        | Texas Red®               | <a href="#">CF®594 Features</a>  |
| BNC40             | CF®640R            | 642/662    | 633-640    | Cy®5                     | <a href="#">CF®640R Features</a> |
| BNC47             | CF®647             | 650/665    | 633-640    | Cy®5                     | <a href="#">CF®647 Features</a>  |
| BNC74             | CF®740             | 742/767    | 633-685    | 775/50                   | <a href="#">CF®740 Features</a>  |
| 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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