

# 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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