

# Aurora Kinase B Monoclonal Mouse Antibody (AURKB/1521)

## Product Description

This antibody recognizes a protein of 39 kDa, which is identified as Aurora kinase B (or Aurora B). Aurora B is a serine/threonine protein kinase and component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. It is important for accurate chromosome segregation, cytokinesis, protein localization to the centromere and kinetochore, correct microtubule-kinetochore attachment, and regulation of the mitotic checkpoint. Aurora B forms a tight complex with inner centrosome protein and survivin. Inactivation of any of these proteins causes similar defects in chromosome segregation. A significant overexpression of Aurora B has been found in a variety of human tumors including non-small cell lung carcinoma, astrocytoma, seminoma and carcinomas of the colon, prostate, endometrium and thyroid. The expression level of Aurora B is associated with cell proliferation and prognosis in these tumors. 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 1521, Anti-Aurora-B (AURKB/1521)**

### Product attributes

Antibody number	#1521
research-areas	Cancer, Cell cycle
Antibody reactivity (species)	Aurora kinase B
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	AURKB/1521
Isotype	IgG2b
Molecular weight	39 kDa
Synonyms	Aurora kinase B; Aurora B; Aurora-1; AURKB; AIK2; AIM-1; ARK-2; AurB; Aurora and Ipl1 like midbody associated protein 1; Aurora-B; Aurora-related kinase 2; Aurora/IPL1-related kinase 2; IPL1; Protein phosphatase 1 regulatory subunit 48; Serine/threonine-protein kinase 12; Serine/threonine-protein kinase aurora-B; STK1; STK12; STK5
Human gene symbol	AURKB
Entrez gene ID	9212
SwissProt	Q96GD4
Unigene	442658
Immunogen	Recombinant human Aurora B protein fragment (aa89-251) (exact sequence is proprietary)
Verified antibody applications	WB (verified)
Antibody target cellular localization	Cytoplasmic, Nucleus
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: 1-2 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	HeLa cells, Tonsil, Placenta, Hodgkin's Lymphoma or Colon Carcinoma
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, Cell cycle
Tumor expression	Colon cancer, Brain cancer, Lung cancer, Prostate cancer, Thyroid cancer

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>
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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