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# 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 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 (target)** | Aurora kinase B |
| **Antibody type** | Primary |
| **Host species** | Mouse |
| **Clonality** | Monoclonal |
| **Clone** | AURKB/1521 |
| **Isotype** | IgG1, kappa |
| **Molecular weight of antigen** | 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 |
| **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** | 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 | 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 |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 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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