

Datasheet for 600-401-465**AURORA KINASE B Antibody****Overview**

Description:	Anti-Aurora B (pan reactive) (RABBIT) Antibody - 600-401-465
Item No.:	600-401-465
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Aurora Kinase B (also known as Aurora- and Ipl1-like midbody-associated protein 1, AIM-1, Aurora/IPL1-related kinase 2, Aurora-related kinase 2, STK-1, and Aurora-B) is a Ser/Thr protein kinase member of the Aurora subfamily that may be directly involved in regulating the cleavage of polar spindle microtubules and is a key regulator for the onset of cytokinesis during mitosis. Aurora Kinase B is localized to the midzone of central spindle in late anaphase and concentrated into the midbody in telophase and cytokinesis and is colocalized with gamma tubulin in the midbody. High levels of Aurora B expression are seen in the thymus, although it is also expressed in the spleen, lung, testis, colon, placenta and fetal liver. Aurora B is expressed during S and G ₂ /M phase and expression is up-regulated in cancer cells during M phase.
Synonyms:	rabbit anti-Aurora B Antibody, AIK2 antibody, AIM1 antibody, ARK2 antibody, AurB antibody, AURKB antibody, Aurora 1 antibody, Aurora and Ipl1 like midbody associated protein 1 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	AURKB
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 225-250 of Human Aurora Kinase B protein.
Purity/Specificity:	Aurora B antibody is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase. Reactivity occurs against human Aurora Kinase B protein. No reaction is expected against Aurora Kinase A. However, 100% sequence homology as indicated by BLAST analysis is on record for this protein from human, mouse, rat, cow, pig, dog and chimpanzee. Cross reactivity with Aurora Kinase B from other sources is not known.
Relevant Links:	• UniProtKB - Q96GD4 • NCBI - 83776600 • GenelD - 9212

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Aurora B is affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 39 kDa in size corresponding to Aurora Kinase B by western blotting in the appropriate cell lysate or extract. Human brain tissue lysate or HeLa cell lysate can be used as a positive control.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IF:	User Optimized
WB:	1:500 - 1:2,000

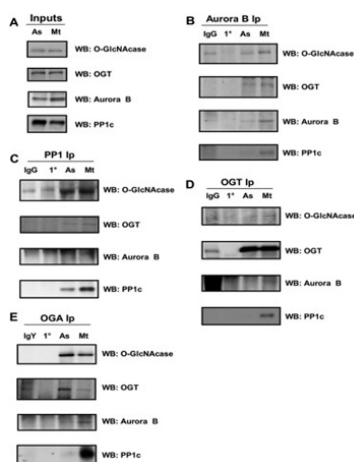
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.39 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store Anti-Aurora B at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

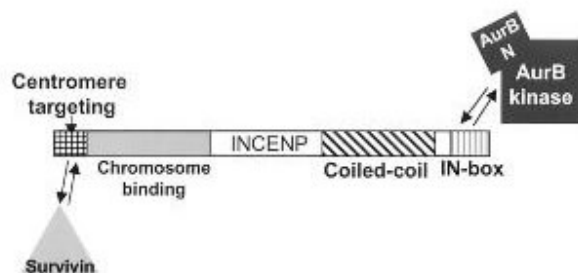


Western Blot

Endogenous Aurora B, PP1, OGT, and OGA all precipitate together in mitotic cells. (A–E) HeLa cells were synchronized by double thymidine block into G1/S and serum released. At 10 h after release, mitotic cells were collected by shake-off and replated. The cells were harvested 1 h after replating to produce a late M phase extract. Cells were lysed and used in coimmunoprecipitation studies. (A) Protein expression of OGA, OGT, Aurora B, and PP1 (30 µg of lysate per lane) as determined by Western blotting (As, asynchronous; Mt, mitotic). (B–E) Endogenous Aurora B, OGA, OGT, and PP1 precipitate each other from synchronized cells (3 mg/ml lysate was used in each precipitation, PP1 IPs were performed with the sc-443 antibody, whereas Aurora B Western blots were performed 600-401-465). Nonspecific IgG and primary antibody (1°) were used as antibody controls. All immunoprecipitations were repeated a minimum of three times. Fig 3. PMID: 18653473

Pathway

Survivin binds the N terminus of INCENP, whereas the N terminus of Aurora B binds the C terminus of INCENP. See Bolton et al. (2002).



References

- Slawson C et al. A mitotic GlcNAcylation/phosphorylation signaling complex alters the posttranslational state of the cytoskeletal protein vimentin. *Mol Biol Cell.* (2008)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.