

**Datasheet for 600-401-Z85****BORA Antibody****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Anti-BORA (RABBIT) Antibody - 600-401-Z85 |
| <b>Item No.:</b>     | 600-401-Z85                               |
| <b>Size:</b>         | 100 µg                                    |
| <b>Applications:</b> | ELISA, IF, IHC, WB                        |
| <b>Reactivity:</b>   | Human, Mouse, Rat                         |
| <b>Host Species:</b> | Rabbit                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Bora (Protein aurora borealis) is a key activator of Aurora Related Protein Kinase A (ARK-1), which is a centrosome-associated serine/threonine kinase that regulates centrosome maturation, bipolar spindle assembly and chromosome segregation during mitosis. Bora is localized to the nucleus until mitosis is initiated, then translocates to the cytoplasm in a Cdc2 dependent manner. Activation of Cdc2 initiates the release of Bora into the cytoplasm where it can bind and activate ARK-1. PLK1 (polo-like kinase-1) interacts with Bora to control the accessibility of its activation loop for phosphorylation and activation by ARK-1. Bora and ARK-1 cooperatively activate PLK1 and control mitotic entry. Bora mutants result in multipolar spindles in mitosis identical to those observed when ARK-1 function is blocked. Thus, the ARK1-Bora-PLK1 regulatory circuit in mammalian cells elucidates a key mechanism in cell cycle regulation. At least three isoforms of Bora are known to exist. |
| <b>Synonyms:</b>     | Bora Antibody, C13orf34, Protein aurora borealis, HsBora                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**Target Details**

|                        |                    |
|------------------------|--------------------|
| <b>Gene Name:</b>      | BORA               |
| <b>Reactivity:</b>     | Human, Mouse, Rat  |
| <b>Immunogen Type:</b> | Conjugated Peptide |

|                            |                                                                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-Bora antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from near the N-terminus of human Bora.     |
| <b>Purity/Specificity:</b> | Anti-Bora Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Bora from other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q6PGQ7</a></li><li>• <a href="#">GeneID - 79866</a></li><li>• <a href="#">NCBI - NP_001273675.1</a></li></ul> |

## Application Details

|                             |                                                                                                                                                                                                                                                                                          |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, IF, IHC, WB                                                                                                                                                                                                                                                                       |
| <b>Application Note:</b>    | Anti-Bora Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 61 kDa in Western Blots of specific cell lysates and tissues. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                          |
| <b>ELISA:</b>               | 1:10,000 - 1:20,000                                                                                                                                                                                                                                                                      |
| <b>IF:</b>                  | 20 µg/mL                                                                                                                                                                                                                                                                                 |
| <b>IHC:</b>                 | 2.5 µg/mL                                                                                                                                                                                                                                                                                |
| <b>WB:</b>                  | 1 - 2 µg/mL                                                                                                                                                                                                                                                                              |

## Formulation

|                        |                                                         |
|------------------------|---------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                               |
| <b>Concentration:</b>  | 1 mg/mL by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.02% (w/v) Sodium Azide                                |
| <b>Stabilizer:</b>     | None                                                    |

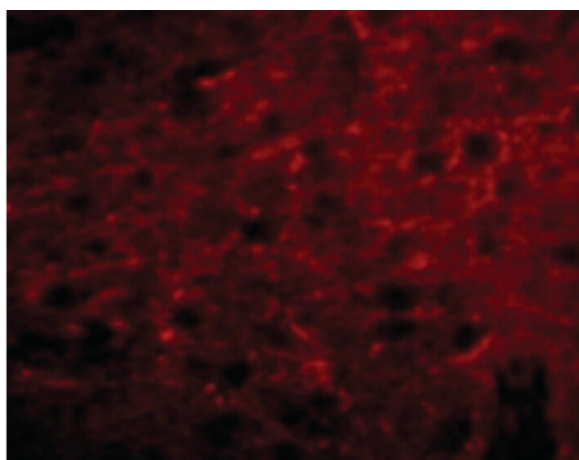
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**Storage Condition:** Store vial 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.

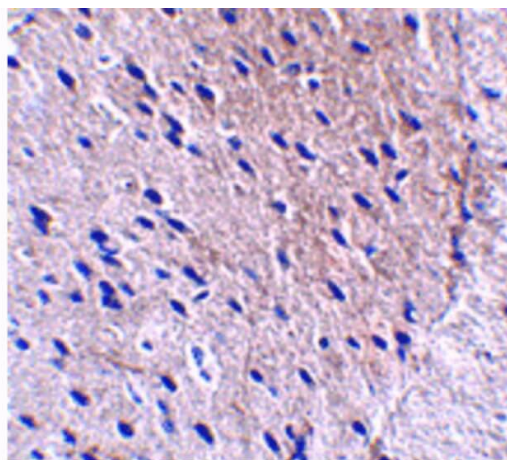
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



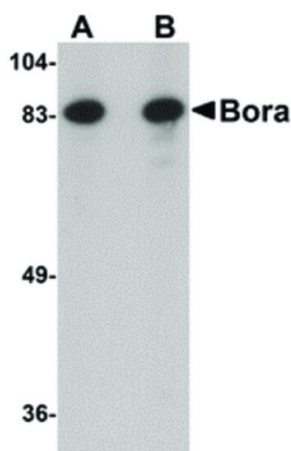
### Immunofluorescence Microscopy

Immunofluorescence Microscopy of Bora antibody. Tissue: Mouse brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Bora antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Bora is cytosolic. Staining: Bora as red fluorescent signal.



### Immunohistochemistry

Immunohistochemistry of Bora antibody. Tissue: Mouse brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Bora antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Bora is cytosolic. Staining: Bora as precipitated purple signal with blue counterstain.



#### Western Blot

Western Blot of Bora antibody. Lane 1: Jurkat cell lysate with Bora antibody at 1 µg/mL. Lane 2: Jurkat cell lysate with Bora antibody at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 61 kDa, 83 kDa for Bora. Other band(s): Bora splice variants and isoforms.

## 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.