

Bora Antibody
Catalog # ASC10877**Specification**

Bora Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q6PGQ7
Other Accession	Q6PGQ7 , 74737659
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Bora antibody can be used for detection of Bora by Western blot at 1-2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

Bora Antibody - Additional Information

Gene ID	79866
Target/Specificity	
C13orf34;	

Reconstitution & Storage

Bora antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

Bora Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Bora Antibody - Protein Information

Name BORA

Synonyms C13orf34

Function

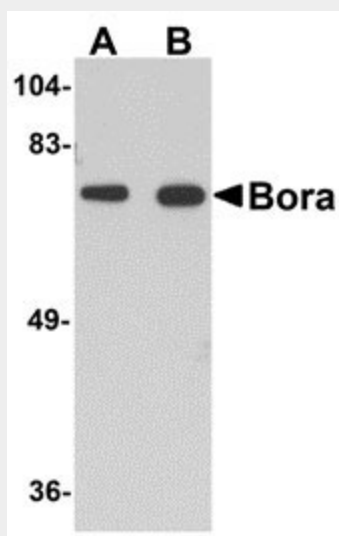
Required for the activation of AURKA at the onset of mitosis.

Bora Antibody - Protocols

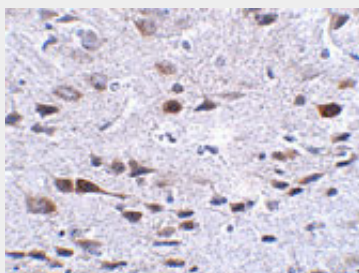
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

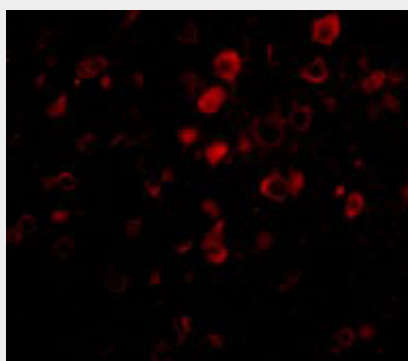
Bora Antibody - Images



Western blot analysis of Bora in mouse brain tissue lysate with Bora antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$.



Immunohistochemistry of Bora in mouse brain tissue with Bora antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of Bora in Mouse Brain cells with Bora antibody at 20 $\mu\text{g/mL}$.

Bora Antibody - Background

Bora Antibody: 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.

Bora Antibody - References

Berdnik D and Knoblich JA. Drosophila Aurora A is required for centrosome maturation and Actin-dependent asymmetric protein localization during mitosis. *Curr. Biol.*2002; 12:640-647.
Wiese C and O'Brien LL. What's so Bor(a)ing about Aurora A activation? *Dev. Cell*2006; 11:133-134.
Hutterer A, Berdnik D, Wirtz-Peitz F, et al. Mitotic activation of the kinase Aurora A requires its binding partner Bora. *Dev. Cell*2006; 11:147-157.
Fu J, Bian M, Jiang Q, et al.. Roles of Aurora kinases in mitosis and tumorigenesis. *Mol. Cancer Res.*2007; 5:1-10.