

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Bora in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 694746
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Bora Gly2-Ala180 Accession # Q6PGQ7
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Bora (Aurora borealis; also C13orf34) is a 61 kDa member of the Bora family of proteins. It is ubiquitously expressed, and plays a key role in cell cycle progression. Plk1 (polo-like kinase-1) is a phosphorylase that is important to the cell during the G2/M transition and mitosis. Its activity is initially regulated by Aurora-A, which phosphorylates and activates Plk1 on Thr210. Bora, Aurora-A and Plk1 all appear to form a complex during G2. Bora predisposes Plk1 to the actions of Aurora-A. Once activated by Aurora-A, Plk1 drives the mitotic mechanism, which includes a third-party phosphorylation of Bora. This initiates BORA dissociation from Aurora-A with subsequent ubiquitination and degradation. Human Bora is 559 amino acids (aa) in length. It contains a Ser-rich region (aa 188-278) and at least eight utilized Ser phosphorylation sites. Phosphorylation may increase the SDS-PAGE MW of Bora to 75-85 kDa. There is one potential alternative start site that lies 60 aa upstream of the standard start site, and a second splice variant the shows a 17 aa substitution for aa 1-87. Over aa 2-180, human Bora shares 84% aa identity with mouse Bora.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.