

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Bora in direct ELISAs.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Bora Gly2-Ala180 Accession # Q6PGQ7
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

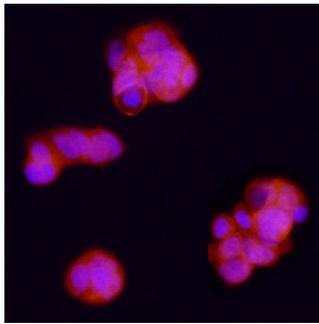
#### APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below

#### DATA

##### Immunocytochemistry



**Bora in MCF-7 Human Cell Line.** Bora was detected in immersion fixed MCF-7 human breast cancer cell line using Goat Anti-Human Bora Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6856) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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.