

DESCRIPTION

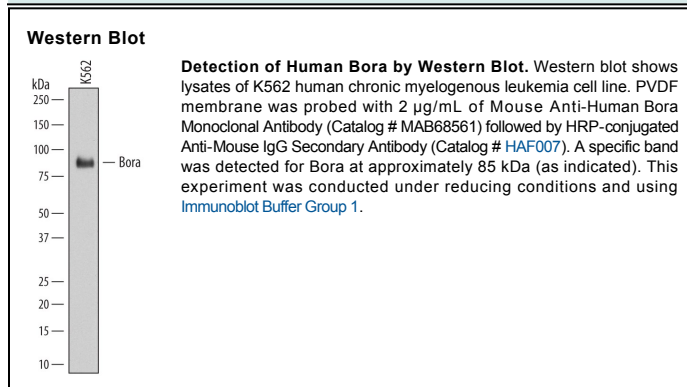
Species Reactivity	Human
Specificity	Detects human Bora in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 694746
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Bora Gly2-Ala180 Accession # Q6PGQ7
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.