

**DESCRIPTION**

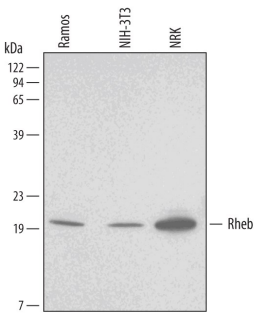
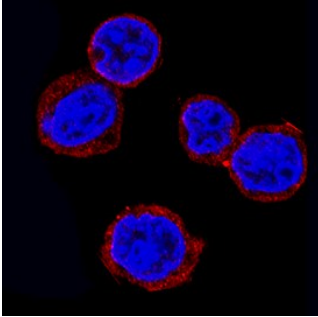
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat Rheb.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 344912
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Rheb Met1-Met184 Accession # AAH66307
<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>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	3-25 µg/mL	See Below

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Human/Mouse/Rat Rheb by Western Blot.</b> Western blot shows lysates of NRK rat normal kidney cell line, Ramos human Burkitt's lymphoma cell line, and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human/Mouse/Rat Rheb Monoclonal Antibody (Catalog # MAB3426) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Rheb at approximately 20 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>Rheb in Ramos Human Cell Line.</b> Rheb was detected in immersion fixed Ramos human Burkitt's lymphoma cell line using Mouse Anti-Human/Mouse/Rat Rheb Monoclonal Antibody (Catalog # MAB3426) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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**

Ras homolog enriched in brain (Rheb) is a novel member of the Ras superfamily of GTP-binding proteins involved in cell growth and cell cycle progression. Expressed in a wide range of tissues, Rheb was initially identified from its induction in rat hippocampal granule cells by seizures and NMDA-dependent synaptic activity. A complex containing the tuberous sclerosis gene products TSC1 and TSC2 functions as a GTPase-activating protein (GAP) for Rheb.