

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse and rat RIPK1/RIP1 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 334640
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human RIPK1/RIP1 Met1-Asn671 Accession # Q13546
<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 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>	0.5 µg/mL	See Below
<b>Simple Western</b>	10 µg/mL	See Below

## DATA

**Western Blot**

**Detection of Human/Mouse/Rat RIPK1/RIP1 by Western Blot.** Western blot shows lysates of Raji human Burkitt's lymphoma cell line, Jurkat human acute T cell leukemia cell line, DA3 mouse myeloma cell line, and L6 rat myoblast cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Mouse/Rat RIPK1/RIP1 Monoclonal Antibody (Catalog # MAB3585) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for RIPK1/RIP1 at approximately 75 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

**Simple Western**

**Detection of Human RIPK1/RIP1 by Simple Western™.** Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line and MCF-7 human breast cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for RIPK1/RIP1 at approximately 78 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human/Mouse/Rat RIPK1/RIP1 Monoclonal Antibody (Catalog # MAB3585). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.

## 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

Receptor-Interacting Protein 1 (RIP1, also known as RIPK1) is a 671 amino acid (aa) 75 kDa protein that contains an N-terminal protein kinase domain, a C-terminal death domain, and a unique internal region called the intermediate domain. RIP1 is a serine/threonine protein kinase and is constitutively expressed in many tissues. RIP1 interacts with the cytoplasmic death domain of FAS and TNF receptors and is an important element in the signal transduction machinery that mediates apoptosis. RIP1 has been shown to interact with a number of proteins including TRADD, TRAF1, TRAF2, and TRAF3, to form larger signaling complexes. These complexes, in turn, activate specific signaling cascades, such as NFκB. RIP1 also interacts through the C-terminal RIP homotypic interaction motif (RHIM) of TRIF in TLR3 dependent activation of NFκB.