

**DESCRIPTION**

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat MEK2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) MEK1 or rhMEK5 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 300317
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human MEK2 Met1-Val400 Accession # P36507
<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>Immunocytochemistry</b>	8-25 µg/mL	See Below

**DATA**

<p><b>Western Blot</b></p>	<p><b>Detection of Human/Mouse/Rat MEK2 by Western Blot.</b> Western blot shows lysates of MCF-7 human breast cancer cell line, U937 human histiocytic lymphoma cell line, NIH-3T3 mouse embryonic fibroblast cell line, and NRK rat normal kidney cell. PVDF membrane was probed with 0.5 µg/mL Mouse Anti-Human/Mouse/Rat MEK2 Monoclonal Antibody (Catalog # MAB2855) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). For additional reference, recombinant human MEK1 and Recombinant Human Active MEK2 (Catalog # 2855-KS) (5 ng/lane) were included. A specific band for MEK2 was detected at approximately 44 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.</p>	<p><b>Immunocytochemistry</b></p> <p><b>MEK2 in HeLa Human Cell Line.</b> MEK2 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human/Mouse/Rat MEK2 Monoclonal Antibody (Catalog # MAB2855) at 25 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 Cells on Coverslips</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**

Mitogen-activated protein kinase kinase 2 (MEK2 or MAP2K2), also known as MKK2, belongs to the STE family of kinases. Both MEK2 and the related MEK1 are dual-specificity kinases, phosphorylating and activating the mitogen-activated protein kinases ERK1 and ERK2 at T and Y positions within the phosphoacceptor sequence T-E-Y. Activation of MEK2 by Raf occurs through phosphorylation at S222 and S226.