

**DESCRIPTION**

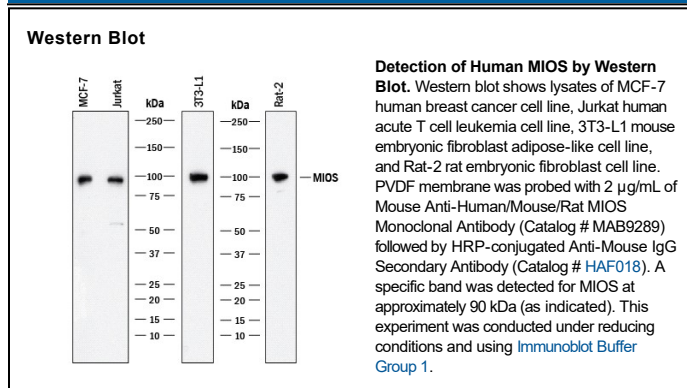
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human MIOS in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 955413
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human MIOS synthetic peptide Accession # Q9NXC5
<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>	2 µg/mL	See Below

**DATA**



**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**

MIOS is a member of the octameric GATOR (GTPase-activating protein (GAP) activity toward RAGs) complex. MIOS and fellow GATOR2 subcomplex members WDR24, WDR59, SEH1L and SEC13 inhibit GATOR1 subcomplex members DEPDC5, NPRL2 and NPRL3. This inhibition by GATOR2 positively regulates mTORC1 signaling, an activity modulated by energy levels, growth factors, and amino acids. Human MIOS is 875 amino acids (aa) in length, and contains six N-terminal WD40 repeats and a C-terminal zinc finger-like domain. Over aa 620-875, human MIOS shares 98% identity with mouse and rat MIOS.