

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MINA in direct ELISAs. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse MINA is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 753002
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human MINA Met1-Gly192 Accession # Q8IUF8
<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
<b>Intracellular Staining by Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CytoF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**

**Western Blot**

**Detection of Human MINA by Western Blot.** Western blot shows lysates of Jurkat human acute T cell leukemia cell line, HepG2 human hepatocellular carcinoma cell line, and JAR human choriocarcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human MINA Monoclonal Antibody (Catalog # MAB7476) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for MINA at approximately 53 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Intracellular Staining by Flow Cytometry**

**Detection of MINA in Jurkat Human Cell Line by Flow Cytometry.** Jurkat human acute T cell leukemia cell line was stained with Mouse Anti-Human MINA Monoclonal Antibody (Catalog # MAB7476, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<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**

MINA (myc-induced nuclear antigen; also Mina53) is a 52-54 kDa member of both the MINA53/NO66 and Jumonji C family of proteins. Its expression is associated with proliferating cells, and it has been found in cytoplasm, nucleus and nucleoli. MINA appears to be induced by c-myc, and synthesized by spermatogonia, occasional squamous epithelium, naïve T cells and select cancer cells. When expressed, MINA is reported to regulate expression of genes such as HGF, EGF-R and IL-4. It may exert its regulatory activity through an intrinsic demethylase function. Mouse MINA is 465 amino acids (aa) in length. It possesses one cupin (or enzyme-associated) region (aa 51-363) that contains a JmjC domain (aa 139-271). There are two potential isoform variants that contain either a 12 aa substitution for aa 145-465, or a 15 aa substitution for aa 228-465. Over aa 2-192, mouse MINA shares 92% and 82% aa sequence identity with rat and human MINA, respectively.