

**DESCRIPTION**

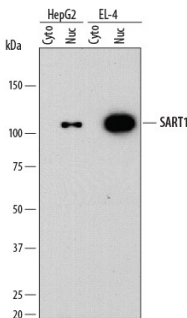
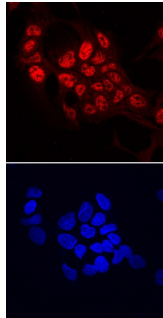
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human SART1 in ELISAs and Western Blots. Detects mouse SART1 in Western Blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 865709
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human SART1 Asn647-Lys800 Accession # O43290
<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>	8-25 µg/mL	See Below

**DATA**

<p><b>Western Blot</b></p> 	<p><b>Detection of Human and Mouse SART1 by Western Blot.</b> Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line and EL-4 mouse lymphoblast cell line. Gels were loaded with 20 µg of HepG2 and 30 µg of EL-4 cytoplasmic (Cyt) extracts and 10 µg of HepG2 and 15 µg of EL-4 nuclear (Nuc) extracts. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human SART1 Monoclonal Antibody (Catalog # MAB8034) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for SART1 at approximately 120 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>SART1 in HepG2 Human Cell Line.</b> SART1 was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Mouse Anti-Human SART1 Monoclonal Antibody (Catalog # MAB8034) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>
---	---	---

**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**

Hypoxia-associated factor (HAF), also known as SART1, is a widely expressed 125 kDa intracellular protein that promotes assembly of the U2-type pre-mRNA spliceosome. SART1 is also an E3 ubiquitin ligase that promotes the ubiquitination and degradation of HIF-1 alpha. In contrast, it enhances the transcriptional activity of HIF-2 alpha. SART1 is upregulated in many tumor types and enables tumor growth during chronic hypoxia. Within amino acids 647-800, human SART1 shares 100% aa sequence identity with mouse and rat SART1.