

DESCRIPTION

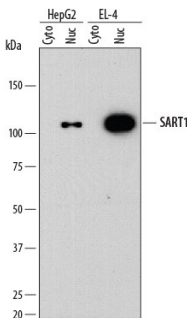
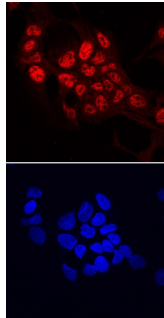
Species Reactivity	Human
Specificity	Detects human SART1 in ELISAs and Western Blots. Detects mouse SART1 in Western Blots.
Source	Monoclonal Mouse IgG ₁ Clone # 865709
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human SART1 Asn647-Lys800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

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p> 	<p>Detection of Human and Mouse SART1 by Western Blot. 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>Immunocytochemistry</p>  <p>SART1 in HepG2 Human Cell Line. 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 Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.