

DESCRIPTION

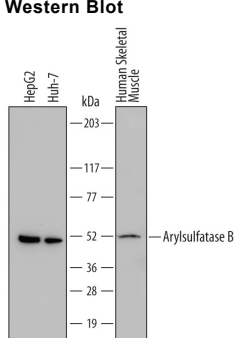
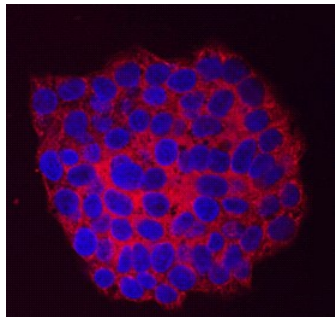
Species Reactivity	Human
Specificity	Detects human Arylsulfatase B/ARSB in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) ARSA, rhARSJ, or recombinant mouse ARSG is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 708401
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Arylsulfatase B/ARSB Ser37-Met533 Accession # P15848
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 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.

	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 Arylsulfatase B/ARSB by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, Huh-7 human hepatoma cell line, and human skeletal muscle tissue. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Arylsulfatase B/ARSB Monoclonal Antibody (Catalog # MAB4415) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Arylsulfatase B/ARSB at approximately 47 to 54 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>Arylsulfatase B/ARSB in HepG2 Human Cell Line. Arylsulfatase B/ARSB was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Mouse Anti-Human Arylsulfatase B/ARSB Monoclonal Antibody (Catalog # MAB4415) at 10 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 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

Arylsulfatase B (ARSB) is a lysosomal enzyme of the sulfatase family that functions as an *N*-acetylgalactosamine-4-sulfatase (1). The enzyme is also active against chondroitin sulfate and dermatan sulfate (2). Deficiencies in ARSB activity are responsible for the lysosomal storage disease mucopolysaccharidosis Type VI, also known as Maroteaux-Lamy Syndrome (3).

References:

1. Peters, C. *et al.* (1990) *J. Biol. Chem.* **265**:3374.
2. O'Brien, J.S. *et al.* (1974) *Biochem. Biophys. Res. Commun.* **60**:1170.
3. Wicker, G. *et al.* (1991) *J. Biol. Chem.* **266**:21386.