

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ARSA in direct ELISAs and Western blots. In direct ELISAs, less than 30% cross-reactivity with recombinant mouse ARSA is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ARSA Arg19-Ala507 Accession # AAH14210
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.

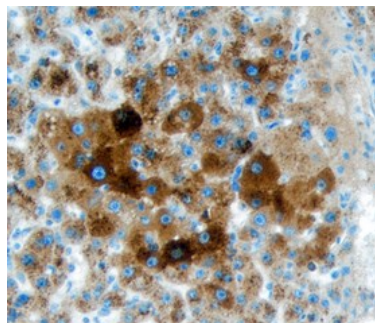
APPLICATIONS

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	0.1 µg/mL	Recombinant Human Arylsulfatase A/ARSA (Catalog # 2485-SU)
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Arylsulfatase A/ARSA (Catalog # 2485-SU), see our available Western blot detection antibodies

DATA

Immunohistochemistry



Arylsulfatase A/ARSA in Human Liver. Arylsulfatase A/ARSA was detected in immersion fixed paraffin-embedded sections of human liver using 1.7 µg/mL Human Arylsulfatase A/ARSA Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2485) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

As a member of the sulfatase family, ARSA is required for the lysosomal degradation of cerebroside-3-sulfate, a sphingolipid sulfate ester and a major constituent of the myelin sheet (1). The ARSA deficiency results in metachromatic leukodystrophy (MLD), a lysosomal storage disease in the central and peripheral nervous systems with severe and progressive neurological symptoms (2). The deduced amino acid sequence of human ARSA consists of a signal peptide (residues 1-18) and a mature chain (residues 19-507) (3). Recombinant human ARSA corresponds to the mature chain and has sulfatase activity described above.

References:

1. Lukatela, G. *et al.* (1998) *Biochemistry* **37**:3654.
2. Parenti, G. *et al.* (1997) *Curr. Opin. Genet. & Dev.* **7**:386.
3. Stein, C. *et al.* (1989) *J. Biol. Chem.* **264**:1252.