

Basic Information

Product Name	Anti-ARSA Antibody (Clone#4C10)	
Gene Name	ARSA	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2a	
Species Reactivity	human, mouse, rat	
Tested Application	FCM, WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ARSA, different from the related mouse sequence by six amino acids.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	54 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

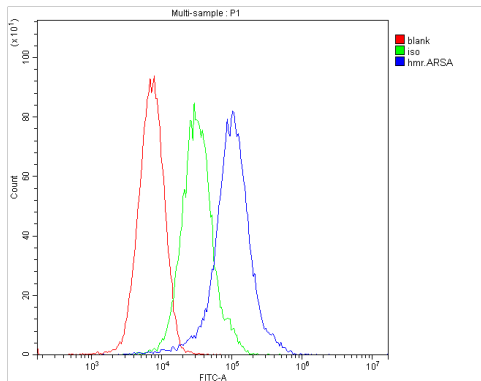
Storage

12 months from date of receipt, -20°C as supplied.

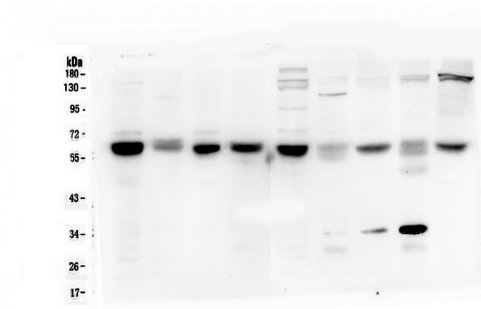
Background Information

Arylsulfatase A (ARSA) is an enzyme that breaks down sulfatides, namely cerebroside 3-sulfate into cerebroside and sulfate. In humans, arylsulfatase A is encoded by the ARSA gene. ARSA is mapped to 22q13.33. The protein encoded by this gene hydrolyzes cerebroside sulfate to cerebroside and sulfate. Defects in this gene lead to metachromatic leucodystrophy (MLD), a progressive demyelination disease which results in a variety of neurological symptoms and ultimately death. Alternatively spliced transcript variants have been described for this gene.

Selected Validation Data



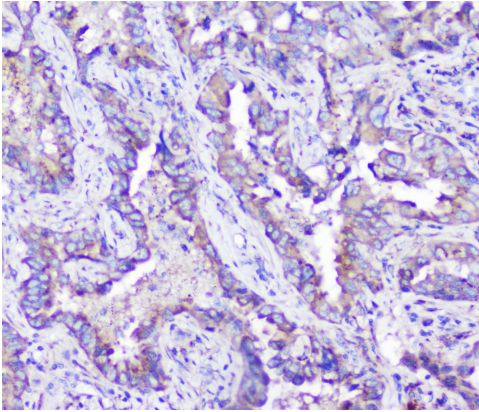
Flow Cytometry analysis of ANA-1 cells using anti-ARSA antibody (M02583). Overlay histogram showing ANA-1 cells stained with M02583 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-ARSA Antibody (M02583, 1:100) for 30 min at 20°C. DyLight488 conjugated goat anti-mouse IgG (BA1126, 1:100) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



Western blot analysis of ARSA using anti-ARSA antibody (M02583). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat testis tissue lysates,
Lane 2: rat liver tissue lysates,
Lane 3: rat brain tissue lysates,
Lane 4: rat lung tissue lysates,
Lane 5: mouse testis tissue lysates,
Lane 6: mouse liver tissue lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: mouse lung tissue lysates,
Lane 9: mouse HEPA1-6 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-ARSA antigen affinity purified monoclonal antibody (M02583) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ARSA at approximately 54 kDa. The expected band size for ARSA is at 54 kDa.



IHC analysis of ARSA using anti-ARSA antibody (M02583).

ARSA was detected in a paraffin-embedded section of human lung cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-ARSA Antibody (M02583) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.