antibody and ELISA experts BOSTER BIOLOGICAL TECHNOLOGY Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator, East Lake High-Tech Development Zone, Wuhan.

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Basic Information		
Product Name	Anti-ARSA Antibody	
Gene Name	ARSA	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	lgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 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	Immunogen affinity purified.	
Observed MW	54 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): Immunocytochemistry/Immunofluorescence (ICC/IF): Flow Cytometry (Fixed): (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or mins is required for the staining of formalin/paraffin sections determined by end user.	

## **Storage**

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

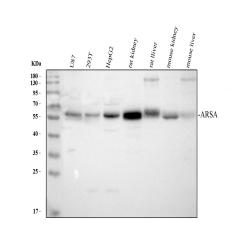
## **Background Information**

Arylsulfatase A (ARSA) is an enzyme that breaks down sulfatides, namely cerebroside 3-sulfate intocerebroside 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.

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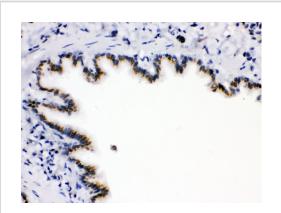
## **Selected Validation Data**



Western blot analysis of ARSA using anti-ARSA antibody (PB0501). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

- Lane 1: human U87 whole cell lysates,
- Lane 2: human 293T whole cell lysates,
- Lane 3: human HepG2 whole cell lysates,
- Lane 4: rat kidney tissue lysates,
- Lane 5: rat liver tissue lysates,
- Lane 6: mouse kidney tissue lysates,
- Lane 7: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ARSA antigen affinity purified polyclonal antibody (PB0501) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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 (PB0501). ARSA was detected in a paraffin-embedded section of rat lung tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ARSA Antibody (PB0501) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

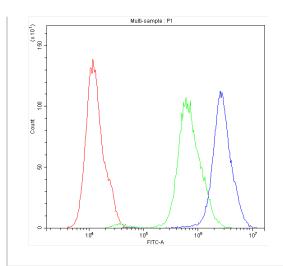
## Product datasheet Anti-ARSA Antibody Catalog Number: PB0501

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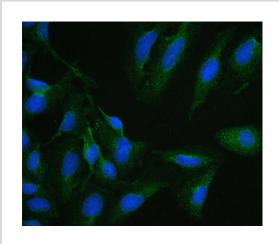
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antibody and FLISA

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Flow Cytometry analysis of Hela cells using anti-ARSA antibody (PB0501). Overlay histogram showing Hela cells stained with PB0501 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ARSA Antibody (PB0501) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF analysis of ARSA using anti- ARSA antibody (PB0501). ARSA was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2µg/mL rabbit anti- ARSA Antibody (PB0501) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.