

## International Office

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**Research Use Only. Not for  
diagnostic or therapeutic use.**

## EB07457 - Goat Anti-Arylsulfatase A Antibody

Size: 100µg specific antibody in 200µl



### Target Protein

**Principal Names:** ARSA, arylsulfatase A, MLD, cerebroside-sulfatase, cerebroside 3-sulfatase

**Official Symbol:** ARSA

**Accession Number(s):** NP\_000478.3; NP\_001078897.1

**Human GeneID(s):** [410](#)

**Non-Human GeneID(s):** 11883 (mouse), 315222 (rat)

### Immunogen

Peptide with sequence C-YDLSKDPGENYN, from the internal region of the protein sequence according to NP\_000478.3; NP\_001078897.1.

Please note the [peptide](#) is available for sale.

### Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

### Applications Tested

**Peptide ELISA:** antibody detection limit dilution 1:32000.

**Western blot:** Approx 60-65Da band observed in Mouse and Rat Testis lysates (calculated MW of 53.7kDa according to Mouse NP\_033843.2 and Rat NP\_001030105.2;). This molecular weight is routinely observed by other sources and was successfully blocked by incubation with the immunizing peptide. Recommended concentration: 0.3-1µg/ml. Primary incubation 1 hour at room temperature.

**IHC:** Paraffin embedded Human Brain (Cortex) and Testis. Recommended concentration: 5µg/ml.

**Immunofluorescence:** Strong expression of the protein seen in the Golgi apparatus of HeLa cells. Recommended concentration: 10µg/ml.

**Flow Cytometry:** Flow cytometric analysis of HeLa cells. Recommended concentration: 10ug/ml.

### Species Reactivity

**Tested:** Human, Mouse, Rat

**Expected from sequence similarity:** Human, Mouse, Rat

### Specific References

**This antibody has been successfully used in Western blot on Mouse:**

Guo R, Hu X, Yamada Y, Harada M, Nakajima T, Kashiwara T, Yamada M, Aoyama T, Kamijo Y

Effects of hypertension and antihypertensive treatments on sulfatide levels in serum and its metabolism

Hypertens Res. 2019 May;42(5):598-609.

PMID: 30531843

**This antibody has been successfully used in WB on Mouse:**

Lu Y, Harada M, Kamijo Y, Nakajima T, Tanaka N, Sugiyama E, Kyogashima

M, Gonzalez FJ, Aoyama T

Peroxisome proliferator-activated receptor  $\alpha$  attenuates high-cholesterol diet-induced toxicity and pro  
Arch Toxicol. 2019 Jan;93(1):149-161

PMID: 30341732

**This antibody has been successfully used in the following paper:**

Kanbe H, Kamijo Y, Nakajima T, Tanaka N, Sugiyama E, Wang L, Fang ZZ, Hara A, Gonzalez FJ, Aoyama T

Chronic ethanol consumption decreases serum sulfatide levels by suppressing hepatic cerebroside sulfotransferase expression in mice.

Arch Toxicol. 2014 Feb;88(2):367-79.

PMID: 24065054

**This antibody has been successfully used in WB on Mouse in the following paper:**

Kimura T, Nakajima T, Kamijo Y, Tanaka N, Wang L, Hara A, Sugiyama E, Tanaka E, Gonzalez FJ, Aoyama T

Hepatic Cerebroside Sulfotransferase Is Induced by PPAR $\alpha$  Activation in Mice.

PPAR Res. 2012;2012:174932.

PMID: 22645601

**This antibody has been successfully used in WB on Mouse in the following paper:**

Kiebish MA, Young DM, Lehman JJ, Han X.

Chronic caloric restriction attenuates a loss of sulfatide content in PGC-1 $\alpha$ <sup>-/-</sup> mouse cortex: a potential lipidomic role of PGC-1 $\alpha$  in neurodegeneration.

J Lipid Res. 2012 Feb;53(2):273-81.

PMID: 22114039

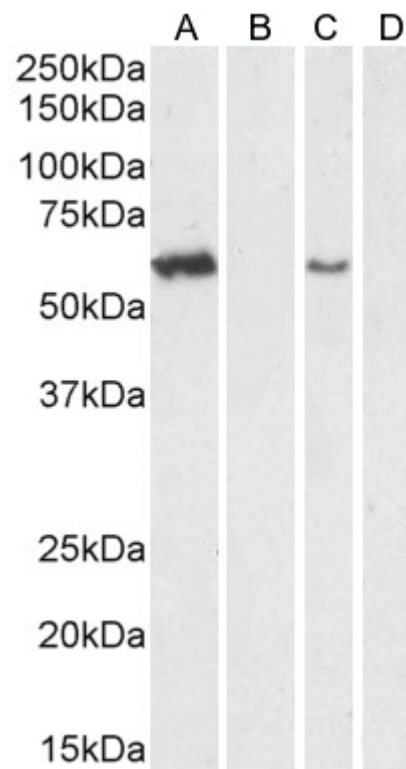
**This antibody has been successfully used in the following paper:**

Zhang X, Nakajima T, Kamijo Y, Li G, Hu R, Kannagi R, Kyogashima M, Aoyama T, Hara A.

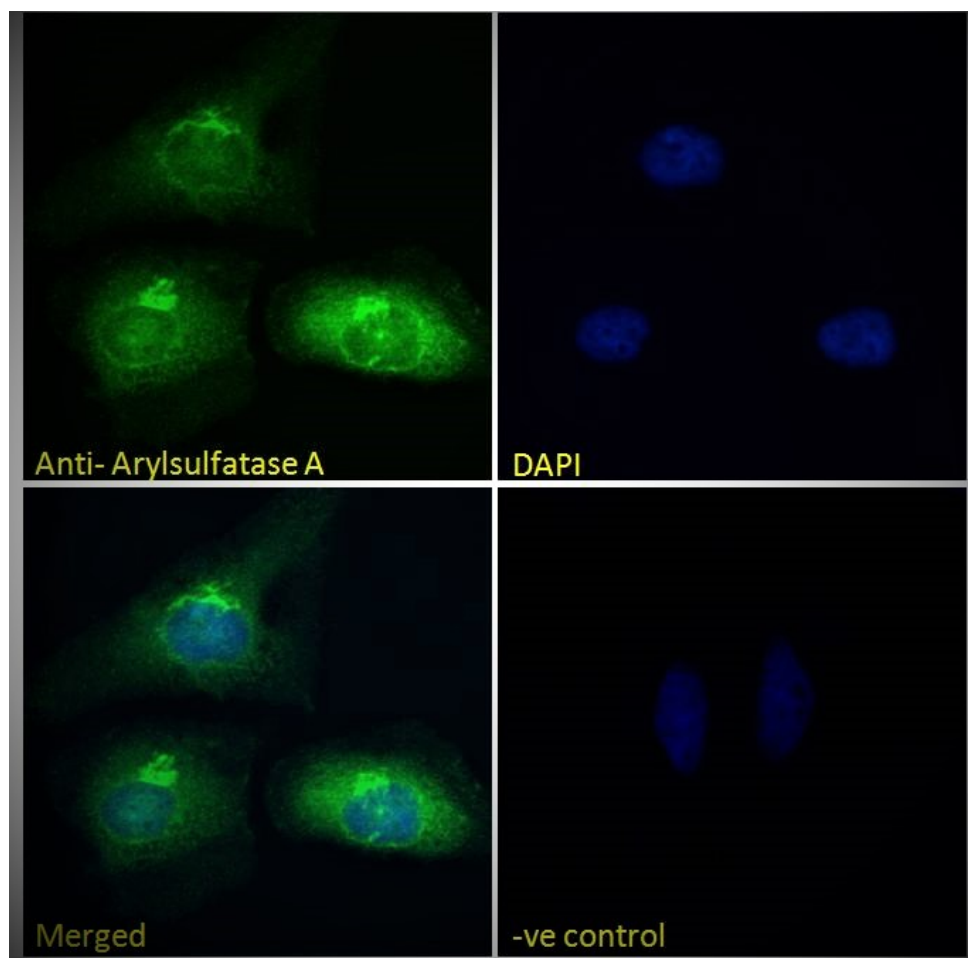
Acute kidney injury induced by protein-overload nephropathy down-regulates gene expression of hepatic cerebroside sulfotransferase in mice, resulting in reduction of liver and serum sulfatides.

Biochem Biophys Res Commun. 2009 Dec 25;390(4):1382-8.

PMID: 19895791

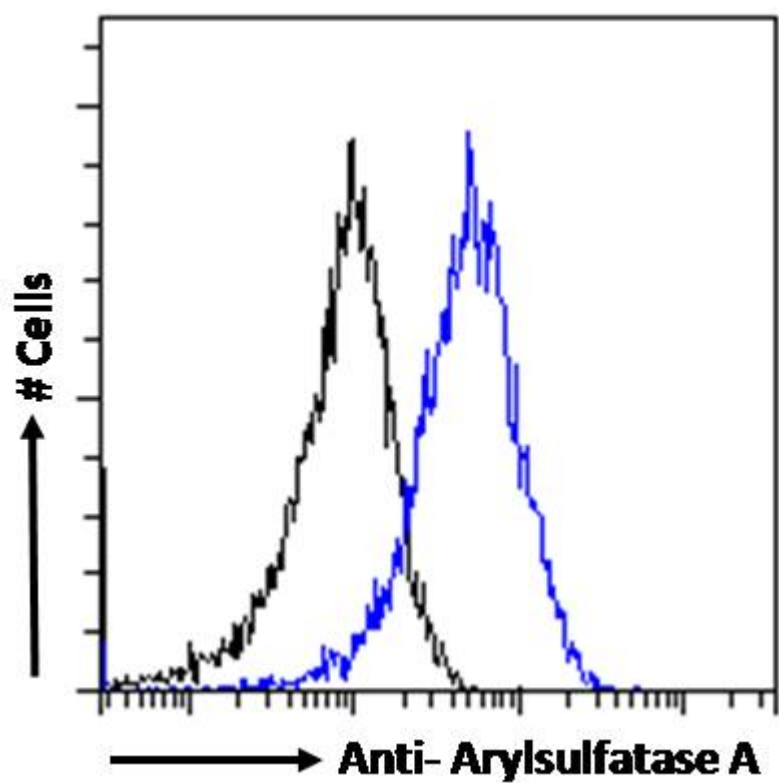


EB07457 (1µg/ml) staining of Mouse Testes lysate (A) + peptide (B) and (0.3ug/ml) Rat Testes lysate (C) + peptide (D) 35µg protein in RIPA buffer). Detected by chemiluminescence.

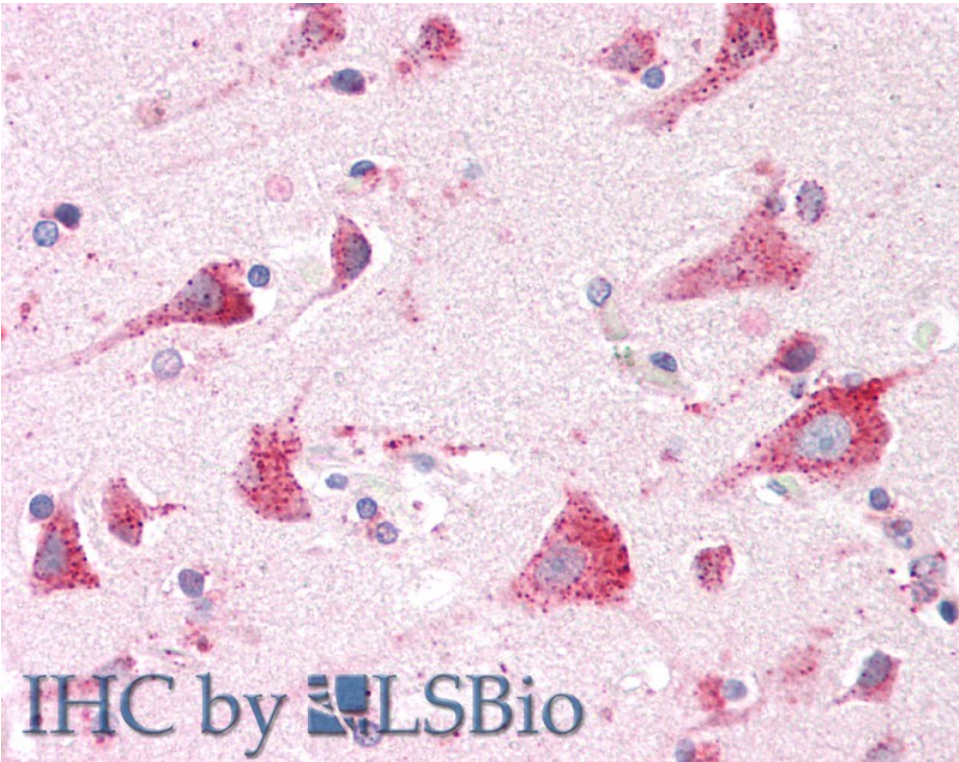


EB07457 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing Golgi

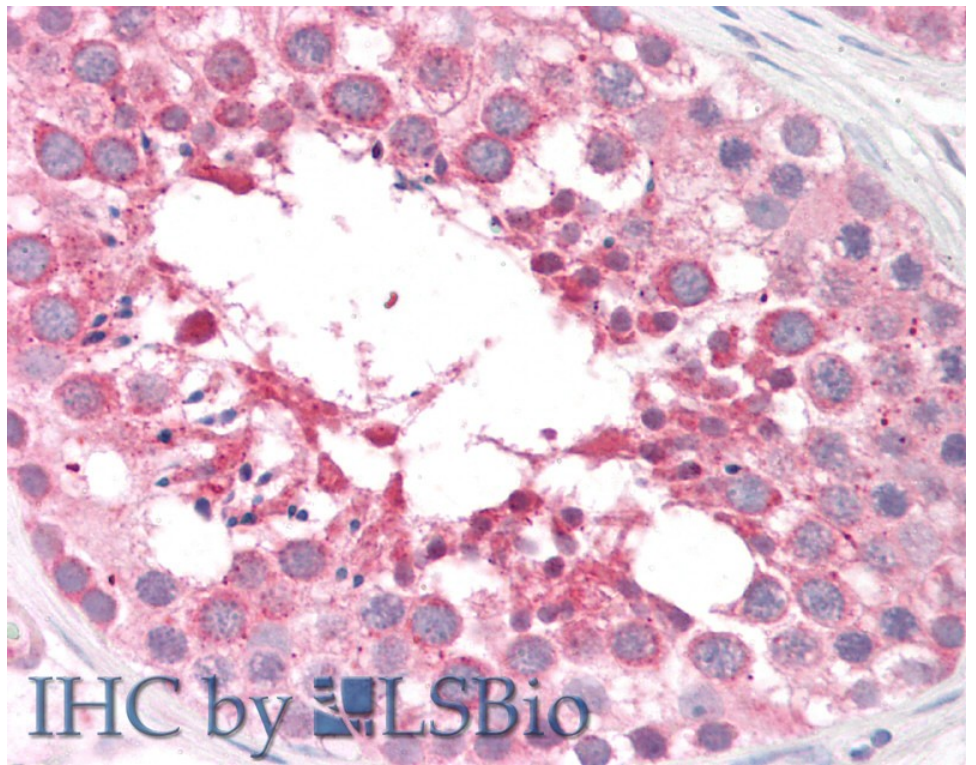
apparatus staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



EB07457 Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



EB07457 (5µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB07457 (5µg/ml) staining of paraffin embedded Human Testis. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.