Datasheet for ABIN7320436

Arylsulfatase A Protein (ARSA) (His tag)

1 Image

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Overview

Quantity:	50 µg
Target:	Arylsulfatase A (ARSA)
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Arylsulfatase A protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse Arylsulfatase A/ARSA Protein (His Tag)(Active)
Sequence:	Met 1-Ser 506
Characteristics:	A DNA sequence encoding the extracellular domain (Met 1-Ser 506) of mouse ARSA (NP_033843.2) precursor was expressed with a C-terminal polyhistidine tag.
Purity:	> 97 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave p-Nitrocatechol Sulfate (PNCS). The specific activity is >100 pmoles/min/µg.

Target Details

Target:	Arylsulfatase A (ARSA)

Target Details

Alternative Name:	Arylsulfatase A/ARSA (ARSA Products)
Background:	Background: Arylsulfatase A (ARSA) is synthesized as a 52KDa lysosomal enzyme. It is a member of the sulfatase family that is required for the lysosomal degradation of cerebroside-3-sulfate, a sphingolipid sulfate ester and a major constituent of the myelin sheet. Arylsulfatase A is activated by a required co- or posttranslational modification with the oxidation of cysteine to formylglycine. Metachromatic leukodystrophy (MLD) is a lysosomal storage disease in the central and peripheral nervous systems with severe and progressive neurological symptoms caused by the deficiency of Arylsulfatase A. Deficiency of this enzyme is also found in apparently healthy individuals, a condition for which the term pseudodeficiency is introduced. ARSA forms dimers after receiving three N-linked oligosaccharides in the endoplasmic reticulum, and then the dimers are transported to the Golgi where they receive mannose 6-phosphate recognition markers. And thus, ARSA is transported and delivered to dense lysosomes in a mannose 6-phosphate receptor-dependent manner. It has been shown that within the lysosomes, the ARSA dimers can oligomerize to an octamer in a pH -dependent manner. The ARSA deficiency leads to metachromatic leucodystrophy (MLD), a lysosomal storage disorder associated with severe and progressive demyelination in he central and peripheral nervous system. Additionally, the serum level of arylsulfatase A might be helpful in diagnosis of lung and central nervous system cancer. Synonym: As-2,AS-A,As2,ASA,AW212749,TISP73
Molecular Weight:	53.5 kDa
NCBI Accession:	NP_033843

Application Details

Restrictions:	For Research Use only

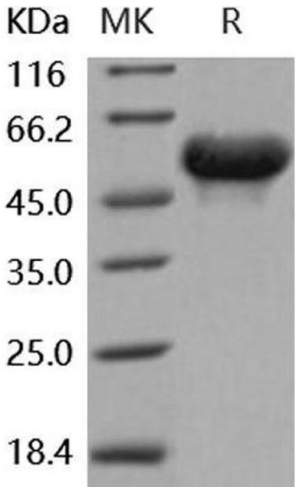
Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 25 mM Tris, 0.15 mM NaCl, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted

Handling

samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.