## PRODUCT INFORMATION

## Expression system

E.coli

## Domain

21-509aa
UniProt No.
P15289
NCBI Accession No.
NP_000478.3

## Alternative Names

ASA, Cerebroside-sulfatase, metachromatic leucodystrophy(MLD)

## PRODUCT SPECIFICATION

## Molecular Weight

54.3 kDa (512aa)

## Concentration

1mg/ml (determined by Bradford assay)

## Formulation

Liquid in. 20 mM Tris- HCl buffer ( pH 8.0 ) containing 0.4 M uREA, $10 \%$ glycerol

## Purity

> 85\% by SDS-PAGE

## Tag

His-Tag

## Application

SDS-PAGE, Denatured

## Storage Condition

Can be stored at +2 C to +8 C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

## Description

ARSA hydrolyzes cerebrosidesulfate 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. Recombinant human ARSA protein, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence<br><MGSSHHHHHH SSGLVPRGSH MGS>RPPNIVL IFADDLGYGD LGCYGHPSST TPNLDQLAAG GLRFTDFYVP

VSLCTPSRAA LLTGRLPVRM GMYPGVLVPS SRGGLPLEEV TVAEVLAARG YLTGMAGKWH LGVGPEGAFL PPHQGFHRFL GIPYSHDQGP CQNLTCFPPA TPCDGGCDQG LVPIPLLANL SVEAQPPWLP GLEARYMAFA HDLMADAQRQ DRPFFLYYAS HHTHYPQFSG QSFAERSGRG PFGDSLMELD AAVGTLMTAI GDLGLLEETL VIFTADNGPE TMRMSRGGCS GLLRCGKGTT YEGGVREPAL AFWPGHIAPG VTHELASSLD LLPTLAALAG APLPNVTLDG FDLSPLLLGT GKSPRQSLFF YPSYPDEVRG VFAVRTGKYK AHFFTQGSAH SDTTADPACH ASSSLTAHEP PLLYDLSKDP GENYNLLGGV AGATPEVLQA LKQLQLLKAQ LDAAVTFGPS QVARGEDPAL QICCHPGCTP RPACCHCPDP HA

## General References

Matthes,F., et al. (2011) J. Biol. Chem. 286 (20), 17487-17494
Hayashi,T., et al. (2011) Psychiatry Clin. Neurosci. 65 (1), 105-108

DATA

SDS-PAGE


3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

