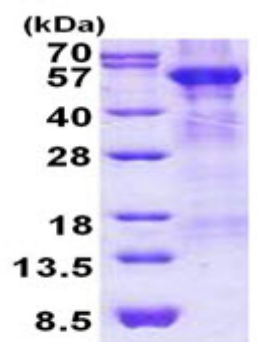


## AR50911PU-S

## Human Arylsulfatase A (21-509, His-tag) - Purified

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <b>Alternate names:</b>  | ARSA, ASA, Cerebroside-sulfatase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Quantity:</b>         | 0.1 mg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Concentration:</b>    | 1 mg/ml (determined by Bradford assay)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Background:</b>       | ARSA 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.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Uniprot ID:</b>       | <a href="#">P15289</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>NCBI:</b>             | <a href="#">NP_000478</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>GeneID:</b>           | <a href="#">410</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Species:</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source:</b>           | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Format:</b>           | <b>State:</b> Liquid purified protein<br><b>Purity:</b> >90% by SDS - PAGE<br><b>Buffer System:</b> 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M UREA, 10% glycerol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Description:</b>      | Recombinant human ARSA protein, fused to His-tag at N-terminus, was expressed in E.coli.<br><b>AA Sequence:</b><br>MGSSHHHHH SSGLVPRGSH MGSRPPIVL IFADDLGYGD LGCYGHPST TPNLQDLAAG<br>GLRFTDFYVP VSLCTPSRAA LLTGRLPVRM GMYPGVLVPS SRGGLPLEEV TVAELVAARG<br>YLTGMAGKWH LGVGPEGAFL PPHQGFHREL GIPYSHDQGP CQNLTCFPPA TPCDGGCDQG<br>LVPIPLLALN SVEAQPPWLP GLEARYMAFA HDLMADAQRQ DRPFLLYYAS HHTHYPQFSG<br>QSFAERSGRG PFGDSLMELE AAVGTLMTAI GDLGLLEETL VIFTADNGPE TMRMSRGGS<br>GLLRGCGKGT YEGGVREPAL AFWPGHIAPG VTHELASSLD LLPTLAALAG APLPNVTLDG<br>FDLSPLLGT GKSPRQSLFF YPSYPDEVRG VFAVRTGKYK AHFFTQGSAA SDTTADPACH<br>ASSSLTAHEP PLYDLSKDP GENYNLLGGV AGATPEVLQA LKQLQLLKAQ LDAAVTFGPS<br>QVARGEDPAL QICCHPGCTP RPACCHCPDP HA<br><b>Molecular weight:</b> 54.3 kDa (512aa) |
| <b>Storage:</b>          | Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>General Readings:</b> | Matthes,F., et al. (2011) J. Biol. Chem. 286 (20), 17487-17494 Hayashi,T., et al. (2011) Psychiatry Clin. Neurosci. 65 (1), 105-108                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

Pictures:



15% SDS-PAGE (3ug)