

32-6668: ARSA Human, SF9

Application : Functional Assay

Alternative Name : Arylsulfatase A, Cerebroside-Sulfatase, ASA, Metachromatic Leucodystrophy, MLD, EC 3.1.6.8.

Description

Source: Sf9, Baculovirus cells.

Sterile Filtered clear solution.

The enzyme Arylsulfatase A, also known as cerebroside-sulfatase, is responsible to break down sulfatides. The main molecule that Arylsulfatase A breaks down is cerebroside 3-sulfate into cerebroside and sulfate. The enzyme is encoded by the ARSA gene in humans. Phosphate can form a covalent bond with the Arylsulfatase A's active site 3-oxoalanine, thus, inhibits the protein.

ARSA produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 498 amino acids (21-509a.a.) and having a molecular mass of 53.0kDa. (Molecular size on SDS-PAGE will appear at approximately 50-70kDa). ARSA is expressed with a 9 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

Product Info

Amount : 1 µg / 5 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : ARSA protein solution (0.25mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : ADPRPPNIVL IFADDLGYGD LGCYGHPSST TPNLDQLAAG GLRFTDFYVP VSLCTPSRAA LLTGRLPVRM
GMYPGVLVPS SRGGLPLEEVTVAEVLAARG YLTGMAGKWH LGVGPEGAFLL PPHQGFHRFL GIPYSHDQGP
CQNLTCFPPA TPCDGGCDQG LVPIPLLNL SVEAQQPWLP GLEARYMAFA HDLMADAQRQ DRPFLLYYAS
HHTHYQFSG QSFAERSGRG PFGDSLMELE AAVGTLMTAI GDLGLLEETL VIFTADNGPETMRMRSGGCS
GLLRCGKGT YEGGVREPAL AFWPGHIAPG VTHELASSLD LLPTLAALAG APLPNVTLDG FDLSPLLGT
GKSPRQSLFF YPSYPDEVRG VFAVRTGKYK AHFFTQGSAA SDTTADPACH ASSSLTAHEP PLYDLKDP
GENYNLLGGV AGATPEVLQA LKQLQLLKAQLDAVTFGPS QVARGEDPAL QICCHPGCTP RPACCHCPDP
HAHHHHHH.

Application Note

Specific activity is > 2,500 pmol/min/ug, and defined as the amount of enzyme that hydrolyze 4-Nitrocatechol at pH 5.0 at 37C.