Data Sheet (Cat.No.TMPY-02552)

TargetMol

Adenylosuccinate Lyase Protein, Human, Recombinant (His)

General Information

Synonyms: ASL;adenylosuccinate lyase;ASASE;AMPS

Protein Construction: Ala2-Leu484

Species: Human

Expression Host: E. coli

Accession: P30566-1

Molecular Weight: 56.28 kDa (predicted)

QC Testing

Biological Activity: Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 95% as determined by Bis-Tris PAGE

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Adenylosuccinate lyase (ADSL) is an essential enzyme for de novo purine biosynthesis, ADSL functions in de novo purine synthesis (DNPS) and the purine nucleotide cycle. Adenylosuccinate lyase ADSL) deficiency is a defect of purine metabolism affecting purinosome assembly and reducing metabolite fluxes through purine de novo synthesis and purine nucleotide recycling pathways.

Reference

Nassogne M,et al.(2000) Adenylosuccinase deficiency: an unusual cause of early-onset epilepsy associated with acquired microcephaly. Brain and development. 22 (6): 383-6.
Sivendran S,et al.(2004) Two novel mutant human adenylosuccinate lyases (ASLs) associated with autism and characterization of the equivalent mutant Bacillus subtilis ASL. J Biol Chem. 279 (51): 53789-97.
Lee TT,et al.(1999) His68 and His141 are critical contributors to the intersubunit catalytic site of adenylosuccinate lyase of Bacillus subtilis. Biochemistry. 38 (1): 22-32.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481