Recombinant Human ADSL, His-tagged

Cat. No. ADSL-26897TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length protein, (amino acids 1-484) of Human Adenylosuccinate Lyase with N terminal His tag; 520 amino acids, 59 kDa inclusive of tag.
Species	Human
Source	E.coli
ProteinLength	484 amino acids
Description	Adenylsuccinate lyase is involved in both de novo synthesis of purines and formation of adenosine monophosphate from inosine monophosphate. It catalyzes two reactions in AMP biosynthesis: the removal of a fumarate from succinylaminoimidazole carboxamide (SAICA) ribotide to give aminoimidazole carboxamide ribotide (AICA) and removal of fumarate from adenylosuccinate to give AMP. Adenylosuccinase deficiency results in succinylpurinemic autism, psychomotor retardation, and , in some cases, growth retardation associated with muscle wasting and epilepsy. Two transcript variants encoding different isoforms have been found for this gene.
Conjugation	HIS
Molecular Weight	59.000kDa inclusive of tags
Tissue specificity	Ubiquitously expressed. Both isoforms are produced by all tissues. Isoform 2 is 10-fold less abundant than isoform 1.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Form	Liquid
Purity	>95% by SDS-PAGE
Storage buffer	pH: 8.00Constituents:0.32% Tris HCl, 0.02% DTT, 40% Glycerol, 0.58% Sodium chloride
Storage	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C long term. Avoid repeated freeze / thaw cycles.
Sequences of amino acids	MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDRWGSMAAGGDHGSPDSYRSP LASRYASPEMCFVFSDRYKFRTWRQLWLWLAEAEQTLGLPITDEQIQEMKSNLENID FKMAAEEEKRLRHDVMAHVHTFGHCCPKAAGIIHLGATSCYVGDNTDLIILRNALDLL LPKLARVISRLADFAKERASLPTLGFTHFQPAQLTTVGKRCCLWIQDLCMDLQNLKR VRDDLRFRGVKGTTGTQASFLQLFEGDDHKVEQLDKMVTEKAGFKRAFIITGQTYTR KVDIEVLSVLASLGASVHKICTDIRLLANLKEMEEPFEKQQIGSSAMPYKRNPMRSER CCSLARHLMTLVMDPLQTASVQWFERTLDDSANRRICLAEAFLTADTILNTLQNISEG LVVYPKVIERRIRQELPFMATENIIMAMVKAGGSRQDCHEKIRVLSQQAASVVKQEG GDNDLIERIQVDAYFSPIHSQLDHLLDPSSFTGRASQQVQRFLEEEVYPLLKPYESV MKVKAELCL
Sequence Similarities	Belongs to the lyase 1 family. Adenylosuccinate lyase subfamily.

GENE INFORMATION

Gene Name	ADSL adenylosuccinate lyase [Homo sapiens]
Official Symbol	ADSL
Synonyms	ADSL; adenylosuccinate lyase;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	158
mRNA Refseq	NM_000026
Protein Refseq	NP_000017
MIM	608222
Uniprot ID	P30566
Chromosome Location	22q13.1
Pathway	Alanine, aspartate and glutamate metabolism, organism-specific biosystem; Alanine, aspartate and glutamate metabolism, conserved biosystem; Inosine monophosphate biosynthesis, PRPP + glutamine => IMP, organism-specific biosystem; Inosine monophosphate biosynthesis, PRPP + glutamine =>
Function	(S)-2-(5-amino-1-(5-phospho-D-ribosyl)imidazole-4-carboxamido)succinate AMP-lyase (fumarate-forming) activity; N6-(1,2-dicarboxyethyl)AMP AMP-lyase (fumarate-forming) activity; NOT N6-(1,2-dicarboxyethyl)AMP AMP-lyase (fumarate-forming) activity; N6-(1,2-;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA