

32-2129: ADSL Recombinant Protein

Alternative Name : Adenylosuccinate lyase,ASL,Adenylosuccinase,ASase,ADSL,AMPS.

Description

Source : Escherichia Coli. ADSL Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 520 amino acids (1-484) and having a molecular mass of 59kDa. ADSL is fused to a 36 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Adenylosuccinate lyase (ADSL) is an enzyme which converts adenylosuccinate to AMP and fumarate as part of the purine nucleotide cycle. ADSL is involved in both de novo synthesis of purines and formation of adenosine monophosphate from inosine monophosphate. ADSL catalyzes 2 reactions in AMP biosynthesis: the removal of a fumarate from succinylaminoimidazole carboxamide (SAICA) ribotide to yield aminoimidazole carboxamide ribotide (AICA) and removal of fumarate from adenylosuccinate to yield AMP. Defects in the ADSL are the cause of adenylosuccinase deficiency (ADSL deficiency). ADSL deficiency is an autosomal recessive disorder distinguished by the accumulation in the body fluids of succinylaminoimidazole-carboxamide riboside (SAICA-riboside) and succinyladenosine (S-Ado). Adenylosuccinase deficiency results in succinylpurinemic autism, psychomotor retardation, and in some cases, growth retardation associated with muscle wasting and epilepsy.

Product Info

Amount :	20 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	The ADSL solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 1mM DTT, 40% glycerol and 0.1M NaCl.
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 :	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMAAG GDHGSPDSYR SPLASRYASP EMCFVFS DRY KFRTWRQLWL WLAEAEQTLG LPITDEIQE MKSNLENIDF KMAAEEEEKRL RHDVMAHVHT FGHCCPKAAG IIHLGATSCY VGDNTDLIIL RNALDLLLLPK LARVISRLAD FAKERASLPT LGFTHFQPAQ LTTVGKRCCL WIQDLCMDLQ NLKRVRDDL RFRGKGTGT QASFLQFEG DDHKVEQLDK MVTEKAGFKR AFIITGQTYT RKVDIEVLSV LASLGASVHK ICTDIRLLAN LKEMEPEFEK QQIGSSAMPY KRNPMRSERC CSLARHLMTL VMDPLQTASV QWFERTLDDS ANRRICLAEA FLTADTILNT LQNISEGLVV YPKVIERRIR QELPFMATEN IIMAMVKAGG SRQDCHEKIR VLSQQAASVV KQEGGDNDLI ERIQVDAYFS PIHSQLDHLL DPSSFTGRAS QQVQRFLEEE VYPLLKPYES VMKVKAELCL.

