## **Product information**



**ASL**, 1-464aa

## Human, His-tagged, Recombinant, E.coli

Cat. No. IBATGP1271

Full name: Argininosuccinate lyase NCBI Accession No.: NP\_000039

Synonyms: ASAL

**Description:** ASL (argininosuccinate lyase) belongs to the lyase 1 family. ASL is an enzyme that catalyzes the reversible breakdown of argininosuccinate (ASA) producing the amino acids arginine and fumarate. Located in liver cytosol, ASL is the fourth enzyme of the urea cycle and involved in the biosynthesis of arginine in all species and the production of urea in ureotelic species. While ASS (argininosuccinate synthetase) catalyzes the formation of argininosuccinate from citrulline and aspartate, ASL breaks the newly formed argininosuccinate into L-arginine and fumarate. L-arginine continues through the urea cycle to form urea and orinthine, while fumarate can enter the citric acid cycle. Recombinant human ASL protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

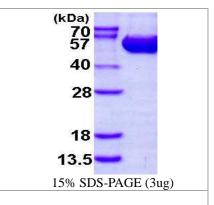
Form: Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT,

10% glycerol, 100mM NaCl

Molecular Weight: 53.8kDa (484aa)

Purity: > 95% by SDS - PAGE

Concentration: 0.5mg/ml (determined by Bradford assay)



## Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MASESGKLWG GRFVGAVDPI MEKFNASIAY DRHLWEVDVQ GSKAYSRGLE KAGLLTKAEM DQILHGLDKV AEEWAQGTFK LNSNDEDIHT ANERRLKELI GATAGKLHTG RSRNDQVVTD LRLWMRQTCS TLSGLLWELI RTMVDRAEAE RDVLFPGYTH LQRAQPIRWS HWILSHAVAL TRDSERLLEV RKRINVLPLG SGAIAGNPLG VDRELLRAEL NFGAITLNSM DATSERDFVA EFLFWASLCM THLSRMAEDL ILYCTKEFSF VQLSDAYSTG SSLMPQKKNP DSLELIRSKA GRVFGRCAGL LMTLKGLPST YNKDLQEDKE AVFEVSDTMS AVLQVATGVI STLQIHQENM GQALSPDMLA TDLAYYLVRK GMPFRQAHEA SGKAVFMAET KGVALNQLSL QELQTISPLF SGDVICVWDY GHSVEQYGAL GGTARSSVDW QIRQVRALLQ AQQA

## General references:

Barbosa P,, et al. (2008). J Biol Chem. 266(8):5286-90

Zhao S., et al (2010) Science 327:1000-1004

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



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