abcam

Product datasheet

Recombinant Human Argininosuccinate Lyase protein ab113605

1 Image

Description

Product name	Recombinant Human Argininosuccinate Lyase protein
Purity	> 95 % SDS-PAGE. ab113605 was purified using conventional chromatography techniques.
Expression system	Escherichia coli
Accession	P04424
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	**MGSSHHHHHHSSGLVPRGSH**MASESGKLWGGRFVGA VDPIMEKFNASIAY DRHLWEVDVQGSKAYSRGLEKAGLLTKAEMDQILHGLDK VAEEWAQGTFK LNSNDEDIHTANERRLKELIGATAGKLHTGRSRNDQVVTDL RLWMRQTCS TLSGLLWELIRTMVDRAEAERDVLFPGYTHLQRAQPIRWS HWILSHAVAL TRDSERLLEVRKRINVLPLGSGAIAGNPLGVDRELLRAELN FGAITLNSM DATSERDFVAEFLFWASLCMTHLSRMAEDLILYCTKEFSF VQLSDAYSTG SSLMPQKKNPDSLELIRSKAGRVFGRCAGLLMTLKGLPST YNKDLQEDKE AVFEVSDTMSAVLQVATGVISTLQIHQENMGQALSPDMLA TDLAYYLVRK GMPFRQAHEASGKAVFMAETKGVALNQLSLQELQTISPL FSGDVICVWDY GHSVEQYGALGGTARSSVDWQIRQVRALLQAQQA
Predicted molecular weight	54 kDa including tags
Amino acids	1 to 464
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab113605** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid

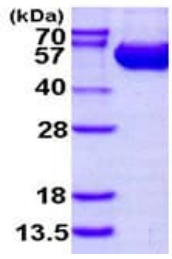
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. pH: 8.00 Constituents: 0.04% DTT, 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

General Info

Pathway	Amino-acid biosynthesis; L-arginine biosynthesis; L-arginine from L-ornithine and carbamoyl phosphate: step 3/3. Nitrogen metabolism; urea cycle; L-arginine and fumarate from (N(omega)-L-arginino)succinate: step 1/1.
Involvement in disease	Defects in ASL are the cause of arginosuccinicaciduria (ARGINSA) [MIM:207900]. Arginosuccinicaciduria is an autosomal recessive disorder of the urea cycle. The disease is characterized by mental and physical retardation, liver enlargement, skin lesions, dry and brittle hair showing trichorrhexis nodosa microscopically and fluorescing red, convulsions, and episodic unconsciousness.
Sequence similarities	Belongs to the lyase 1 family. Argininosuccinate lyase subfamily.
Post-translational modifications	Acetylation modifies enzyme activity in response to alterations of extracellular nutrient availability. Acetylation increased with trichostin A (TSA) or with nicotinamide (NAM). Glucose increases acetylation by about a factor of 3 with decreasing enzyme activity. Acetylation on Lys-288 is decreased on the addition of extra amino acids resulting in activation of enzyme activity.

Images



SDS-PAGE - Recombinant Human Argininosuccinate Lyase protein (ab113605)

15% SDS-PAGE showing ab113605 (3 µg) at approximately 53.8 kDa.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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