10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Adenylosuccinate Lyase Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58422

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P30566
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54889
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Adenylosuccinate Lyase
Epitope Specificity	185-280/484
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the lyase 1 family. Adenylosuccinate lyase subfamily.
DISEASE	Defects in ADSL are the cause of adenylosuccinase deficiency (ADSL deficiency) . ADSL deficiency is an autosomal recessive disorder characterized by the accumulation in the body fluids of succinylaminoimidazole-carboxamide riboside (SAICA-riboside) and succinyladenosine (S-Ado). Most children display marked psychomotor delay, often accompanied by epilepsy or autistic features, or both, although some patients may be less profoundly retarded. Occasionally, growth retardation and muscular wasting are also present.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008].

Additional Information

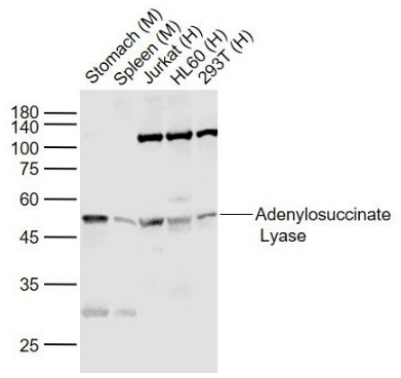
Gene ID	158
Other Names	Adenylosuccinate lyase, ADSL, ASL, 4.3.2.2, Adenylosuccinase, ASase, ADSL, AMPS

Target/Specificity	Ubiquitously expressed. Both isoforms are produced by all tissues. Isoform 2 is 10-fold less abundant than isoform 1.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ADSL
Synonyms	AMPS
Function	Catalyzes two non-sequential steps in de novo AMP synthesis: converts (S)-2-(5-amino-1-(5-phospho-D-ribosyl)imidazole-4- carboxamido)succinate (SAICAR) to fumarate plus 5-amino-1-(5-phospho-D-ribosyl)imidazole-4-carboxamide, and thereby also contributes to de novo IMP synthesis, and converts succinyladenosine monophosphate (SAMP) to AMP and fumarate.
Tissue Location	Ubiquitously expressed. Both isoforms are produced by all tissues. Isoform 2 is 10-fold less abundant than isoform 1

Images



Sample:
Lane 1: Stomach (Mouse) Lysate at 40 ug
Lane 2: Spleen (Mouse) Lysate at 40 ug
Lane 3: Jurkat (Human) Cell Lysate at 30 ug
Lane 4: HL60 (Human) Cell Lysate at 30 ug
Lane 5: 293T (Human) Cell Lysate at 30 ug
Primary: Anti-Adenylosuccinate Lyase (AP58422) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 55/48 kD
Observed band size: 50 kD