

# **Adenylosuccinate Lyase Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58422

## **Specification**

# Adenylosuccinate Lyase Polyclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Physical State

Epitope Specificity Isotype **Purity** affinity purified by Protein A

Buffer

**SIMILARITY** 

Immunogen

**DISEASE** 

Important Note

WB, IHC-P, IHC-F, IF, E

P30566

Rat, Pig, Dog, Bovine

Rabbit Polyclonal 55 KDa Liquid

KLH conjugated synthetic peptide derived

from human Adenylosuccinate Lyase

185-280/484

IaG

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Belongs to the lyase 1 family. Adenylosuccinate lyase subfamily. 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. 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].



## Adenylosuccinate Lyase Polyclonal Antibody - 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**

```
<span class ="dilution_WB">WB~~1:1000</span><br \><span class
="dilution_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution_IF">IF~~1:50~200</span><br \><span class ="dilution_E">E~~N/A</span>
```

### 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.

# Adenylosuccinate Lyase Polyclonal Antibody - 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

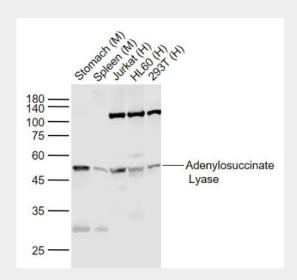
### Adenylosuccinate Lyase Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Adenylosuccinate Lyase Polyclonal Antibody - 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 (bs-6352R) 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