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# Adenylosuccinate Lyase Rabbit pAb

Adenylosuccinate Lyase Rabbit pAb
Catalog # AP58422

## Product Information

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| **Application** | WB, IHC-P, IHC-F, IF |
| **Primary Accession** | P30566 |
| **Reactivity** | Rat, Human, Mouse |
| **Predicted** | Pig, Dog, Horse |
| **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. |
| **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

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

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| **Dilution** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **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. |

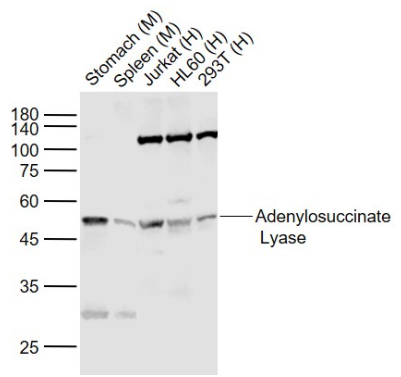
## Protein Information

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| **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 |

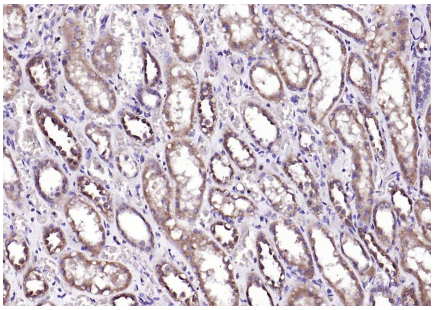
## Background

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## 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



Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Adenylosuccinate Lyase) Polyclonal Antibody, Unconjugated (AP58422) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.