

# ADSL (L-15): sc-86275

## BACKGROUND

ADSL (adenylosuccinate lyase), also known as AMPS, ASL or ASASE, is a 484 amino acid protein that is involved in both purine biosynthesis and in the formation of adenosine monophosphate (AMP) from inosine monophosphate. Expressed ubiquitously, ADSL catalyzes two key reactions in AMP biosynthesis, namely the removal of a fumarate from succinylaminoimidazole carboxamide (SAICA) ribotide to give aminoimidazole carboxamide ribotide (AICA) and the subsequent removal of fumarate from adenylosuccinate to yield AMP. Defects in the gene encoding ADSL are the cause of adenylosuccinase deficiency (ADSL deficiency), an autosomal recessive disorder characterized by epilepsy, growth retardation and muscular wasting. Multiple isoforms of ADSL exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ADSL (human) mapping to 22q13.1; Adsl (mouse) mapping to 15 E1.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

ADSL (L-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ADSL of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86275 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ADSL (L-15) is recommended for detection of ADSL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ADSL (L-15) is also recommended for detection of ADSL in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ADSL siRNA (h): sc-72457, ADSL siRNA (m): sc-140888, ADSL shRNA Plasmid (h): sc-72457-SH, ADSL shRNA Plasmid (m): sc-140888-SH, ADSL shRNA (h) Lentiviral Particles: sc-72457-V and ADSL shRNA (m) Lentiviral Particles: sc-140888-V.

Molecular Weight of ADSL: 52 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HCT-116 whole cell lysate: sc-364175.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.



Try **ADSL (C-11): sc-365623**, our highly recommended monoclonal alternative to ADSL (L-15).