**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 carboxamidase (SAICA) ribotide to give aminoimidazole carboxamid ribotide (AICA) and the subsequent removal of fumarate from adenylosuccinate to yield AMP. Defects in the gene encoding ADSL are the cause of adenylosuccinate 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.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

ADSL (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 327-351 within an internal region of ADSL of human origin.

**PRODUCT**

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ADSL (C-11) is available conjugated to agarose (sc-365623 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365623 HRP), 200 μg/ml, for WB, H(CIP) and ELISA; to either phycoerythrin (sc-365623 PE), fluorescein (sc-365623 FITC), Alexa Fluor® 488 (sc-365623 AF488), Alexa Fluor® 546 (sc-365623 AF546), Alexa Fluor® 594 (sc-365623 AF594) or Alexa Fluor® 647 (sc-365623 AF647), 200 μg/ml, for WB (RGB), IF, H(CIP) and FCM; and to either Alexa Fluor® 680 (sc-365623 AF680) or Alexa Fluor® 790 (sc-365623 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365623 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

ADSL (C-11) is recommended for detection of ADSL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:500-1:5000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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: ADSL (h3): 293T Lysate: sc-170309.

**STORAGE**

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

**DATA**

![Western blot analysis of ADSL expression in Hela A, Jurkat B, HL 60 C, L6 D, A-10 E and BC-11 F whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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