Adenylosuccinate synthetase isozyme 1 (AdSS1), also known as IMP-aspartate ligase 1, is a cytoplasmic homodimer belonging to the adenylosuccinate synthetase family. The gene coding for the protein maps against chromosome 14q32.33. AdSS1 catalyses the committer step in the biosynthesis of AMP. It is a target for antibiotics, herbicides and antitumour drugs due to its importance in purine biosynthesis. AdSS1 is upregulated during muscle development and is highly expressed in muscle tissues such as skeletal muscle, tongue, heart and esophagus.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: ADSSL1 (human) mapping to 14q32.33; Adssl1 (mouse) mapping to 12 F1.

SOURCE
AdSS1 (G-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 5-28 at the N-terminus of AdSS1 of human origin.

PRODUCT
Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-166401 P, 100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein.

APPLICATIONS
AdSS1 (G-9) is recommended for detection of AdSS1 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 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for AdSS1 siRNA (h): sc-105046, AdSS1 siRNA (m): sc-140889, AdSS1 shRNA Plasmid (h): sc-105046-SH, AdSS1 shRNA Plasmid (m): sc-140889-SH, AdSS1 shRNA (h) Lentiviral Particles: sc-105046-V and AdSS1 shRNA (m) Lentiviral Particles: sc-140889-V.

Molecular Weight of AdSS1: 48 kDa.

Positive Controls: rat skeletal muscle extract: sc-364810 or AdSS1 (h): 293T Lysate: sc-116225.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:

DATA

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

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

PROTOCOLS
See our website at www.scbt.com for detailed protocols and support products.