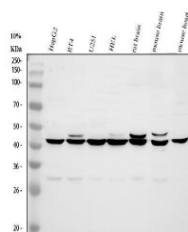


AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody (R32969)

Catalog No.	Formulation	Size
R32969	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P17707
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml
Limitations	This AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody is available for research use only.



AMD1 Antibody Human, Rat and Mouse WB. Western blot analysis using AMD1 Antibody. Lane 1: human HepG2 cells; Lane 2: human RT4 cells; Lane 3: human U251 cells; Lane 4: human HEL cells; Lane 5: rat brain tissue lysate; Lane 6: mouse brain tissue lysate; Lane 7: mouse heart tissue lysate. A specific band is detected at approximately 40-42 kDa in all samples, consistent with the expected molecular weight of AMD1. Similar detection across multiple human cell lines and rodent tissues demonstrates the broad expression of AMD1, a key enzyme in polyamine biosynthesis that supports cellular growth and metabolic homeostasis. These results support the use of AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody for studying AMD1 expression, polyamine metabolism and metabolic regulation.

Description

AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody detects AMD1, the enzyme responsible for producing decarboxylated S-adenosylmethionine, the essential aminopropyl donor required for polyamine biosynthesis. By

catalyzing this rate-limiting step, AMD1 supports the synthesis of spermidine and spermine, polyamines that are critical for cell growth, nucleic acid function, protein synthesis and cellular homeostasis. Because polyamine metabolism is fundamental to normal physiology and disease, AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody is widely used in studies of cell proliferation, metabolism and cancer biology.

AMD1 is a highly regulated cytosolic enzyme whose activity is controlled at the transcriptional, translational and post-translational levels. Cellular polyamine concentrations influence AMD1 expression through feedback mechanisms that maintain metabolic balance while supporting normal growth and differentiation. The enzyme functions immediately downstream of S-adenosylmethionine synthesis, linking methionine metabolism with polyamine production and numerous biosynthetic pathways. Through its central position in cellular metabolism, AMD1 influences DNA replication, RNA processing, chromatin organization and protein translation. AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody provides an important tool for investigating these interconnected metabolic processes.

Increased AMD1 activity has been reported in many human cancers, including prostate, colorectal, liver and gastric carcinomas, where enhanced polyamine biosynthesis supports rapid cellular proliferation and tumor progression. Elevated polyamine metabolism has also been associated with oncogene activation, altered cellular differentiation and resistance to apoptosis. As a result, AMD1 has become an important therapeutic target, and inhibitors of polyamine biosynthesis continue to be investigated for their potential in cancer treatment. Analysis of AMD1 expression has therefore become valuable for understanding tumor metabolism and evaluating metabolic vulnerabilities in proliferating cells.

Beyond oncology, AMD1 contributes to normal embryonic development, tissue regeneration and immune cell function by regulating intracellular polyamine availability. The enzyme also participates in metabolic adaptations to cellular stress and changing nutritional conditions, highlighting its importance in maintaining physiological homeostasis. Ongoing research continues to define additional links between AMD1 activity, metabolic signaling networks and age-related diseases, expanding interest in this enzyme across multiple areas of biomedical research.

NSJ Bioreagents offers AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody products for researchers studying polyamine metabolism, cellular proliferation and metabolic regulation. These antibodies support applications including Western blot, immunohistochemistry, immunofluorescence, immunoprecipitation and flow cytometry for analysis of AMD1 expression and localization. AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody provides a valuable tool for investigating polyamine biosynthesis, metabolic reprogramming and disease-associated alterations in cellular growth and metabolism.

Researchers investigating polyamine metabolism, metabolic regulation and tumor biology may also be interested in our [Cancer Antibodies](#) page, featuring antibodies against metabolic enzymes, signaling proteins and other biomarkers involved in cancer progression and therapeutic research.

Application Notes

Optimal dilution of the AMD1 Antibody / Adenosylmethionine Decarboxylase 1 Antibody should be determined by the researcher.

Immunogen

Amino acids RKNFMKPSHQGYPHRNFQEEIEFLNA were used as the immunogen for the AMD1 antibody.

Storage

After reconstitution, the AMD1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

Alternate Names

S-Adenosylmethionine Decarboxylase 1 antibody, SAMDC antibody, AdoMetDC antibody, Adenosylmethionine

Decarboxylase antibody, S-Adenosylmethionine Decarboxylase antibody, AMD1 Protein antibody