



**Polyclonal Anti-S-adenosylmethionine decarboxylase proenzyme, SAMDC (Sephacose Bead Conjugate)**

**Catalogue No.** PA1070-S

**Lot No.** 05C01

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Human, mouse, rat. No cross reactivity with other proteins.

**Recommended application**

*(Immunoprecipitation(IP))*

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminal of human SAMDC, identical to the related mouse and rat sequence.

**Purification**

Immunogen affinity purified.

**Formulation**

50% slurry in PBS pH 7.2 with 0.01mg NaN<sub>3</sub> preservative.

**Storage**

Store at 4°C for frequent use.

**Description:**

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

**BACKGROUND**

S-adenosylmethionine decarboxylase (AdoMet-DC), also known as S-adenosylmethionine decarboxylase proenzyme (SAMDC), is a key enzyme in polyamine biosynthesis. It is localized to chromosome region 6q21-q22. SAMDC has an unusual distribution in polysomes from cells of T lymphocyte origin. It associates predominantly with monosomes and small polysomes with none located in the preribosomal or ribonucleoprotein pool. SAMDC is a critical regulatory enzyme of the polyamine synthetic pathway, and a well-studied drug target. Since SAMDC is a key regulatory enzyme in the synthesis of spermidine and spermine, the marked increase in SAMDC activity in the neonate and the sustained high enzyme levels throughout adulthood, imply a role for these polyamines in both development and mature brain function.

**REFERENCE**

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2. Hill JR, Morris DR. Cell-specific translation of S-adenosylmethionine decarboxylase mRNA. Regulation by the 5' transcript leader. *J Biol Chem.* 1992 Oct 25; 267(30):21886-93.
3. Ekstrom JL, Mathews II, Stanley BA, Pegg AE, Ealick SE The crystal structure of human S-adenosylmethionine decarboxylase at 2.25 Å resolution reveals a novel fold. *Structure.* 1999 May; 7(5):583-95.
4. Morrison LD, Becker L, Kish SJ. S-adenosylmethionine decarboxylase in human brain. Regional distribution and influence of aging. *Brain Res Dev Brain Res.* 1993 Jun 8; 73(2):237-41.

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**Contact:** Antagene, Inc. | Tel: 1 (866) 964-2589 | Fax: 1 (888) 225-1868 | Email: [Info@antageneinc.com](mailto:Info@antageneinc.com)