Product Information Sheet

Polyclonal Anti-S-adenosylmethionine decarboxylase proenzyme, ***SAMDC***

Catalogue No. PA1070

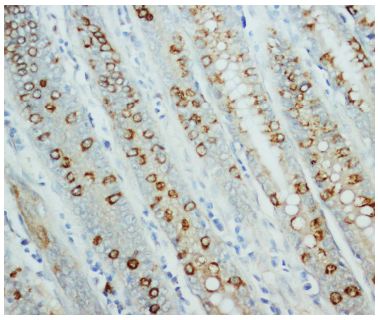
Lot No. 05C01

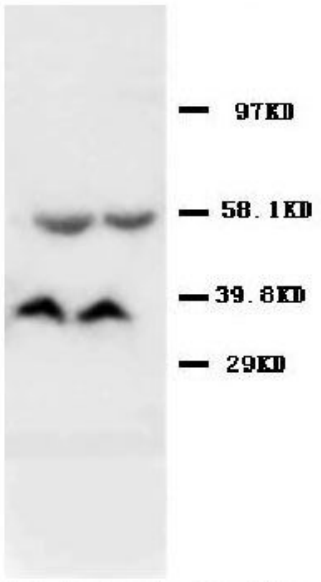
Ig type: rabbit IgG

Size: 100µg/vial

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

Recommended application
Western blot
Immunohistochemistry(P)
Immunohistochemistry(F)
Immunocytochemistry





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

Purity
Immunogen affinity purified.

Application
Western blot
At 1-2µg/ml with the appropriate system to detect SAMDC in cells and tissues.
Immunohistochemistry(P)
At 0.5-1µg/ml to detect SAMDC in formalin fixed and paraffin embedded tissues.
Immunohistochemistry(F)
At 0.5-1µg/ml to detect SAMDC in formalin or acetone fixed tissues.
Immunocytochemistry
At 2-3µg/ml to detect SAMDC in acetone fixed cell. Antigen retrieval by Pepsin and Trypsin is required.
Other applications have not been tested.
Optimal dilutions should be determined by end user.

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg

To reorder contact us at:
Antagene, Inc.
Toll Free: 1(866)964-2589
email: Info@antageneinc.com

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

Thimerosal, 0.05mg NaN_3.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

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

1. Maric SC, Crozat A, Louhimo J, Knuutila S, Janne OA. The human S-adenosylmethionine decarboxylase gene: nucleotide sequence of a pseudogene and chromosomal localization of the active gene (AMD1) and the pseudogene (AMD2). Cytogenet Cell Genet. 1995; 70(3-4):195-9.

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 A 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.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.