



Mouse Anti-CA9 antibody

SLM-33082M

Product Name CA9**Chinese Name** 碳酸酐酶 9 单克隆抗体**Alias**

CA IX; CA-IX; Carbonic anhydrase 9; CAH9_HUMAN; CAIX; Carbonate dehydratase IX; Carbonic anhydrase IX; Carbonic dehydratase; G250; Membrane antigen MN; MN; P54/58N; P54/58N; pMW1; RCC associated protein G250; RCC-associated antigen G250; Renal cell carcinoma associated antigen G250; Renal cell carcinoma-associated antigen G250.

Research Area

Tumour Cell biology immunology Kinases and Phosphatases

Immunogen Species

Mouse

Clonality

Monoclonal

Clone NO.

5H10

React Species

Human

ApplicationsIHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.**Theoretical molecular weight**

46kDa

Cellular localization

The nucleus cytoplasmic

Form

Liquid

Concentration 1mg/ml**immunogen**

Recombinant human Carbonic Anhydrase IX (full length)

Lsotype

IgG

Purification

affinity purified by Protein G

Buffer Solution

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed

[PubMed](#)

Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA IX is a transmembrane protein and the only tumor-associated carbonic anhydrase isoenzyme known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12. [provided by RefSeq, Jul 2008]

Function:

Reversible hydration of carbon dioxide. Participates in pH regulation. May be involved in the control of cell proliferation and transformation. Appears to be a novel specific biomarker for a cervical neoplasia.

Subunit:

Forms oligomers linked by disulfide bonds.

**Product
Detail**

Subcellular Location:

Nucleus. Nucleus, nucleolus. Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus membrane; Single-pass type I membrane protein. Note=Found on the surface microvilli and in the nucleus, particularly in nucleolus.

Tissue Specificity:

Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa.

Similarity:

Belongs to the alpha-carbonic anhydrase family.

SWISS:

Q16790

Gene ID:

768

Database links:

[Entrez Gene: 768](#) Human

[Entrez Gene: 230099](#) Mouse

[Omim: 603179](#) Human

[SwissProt: Q16790](#) Human

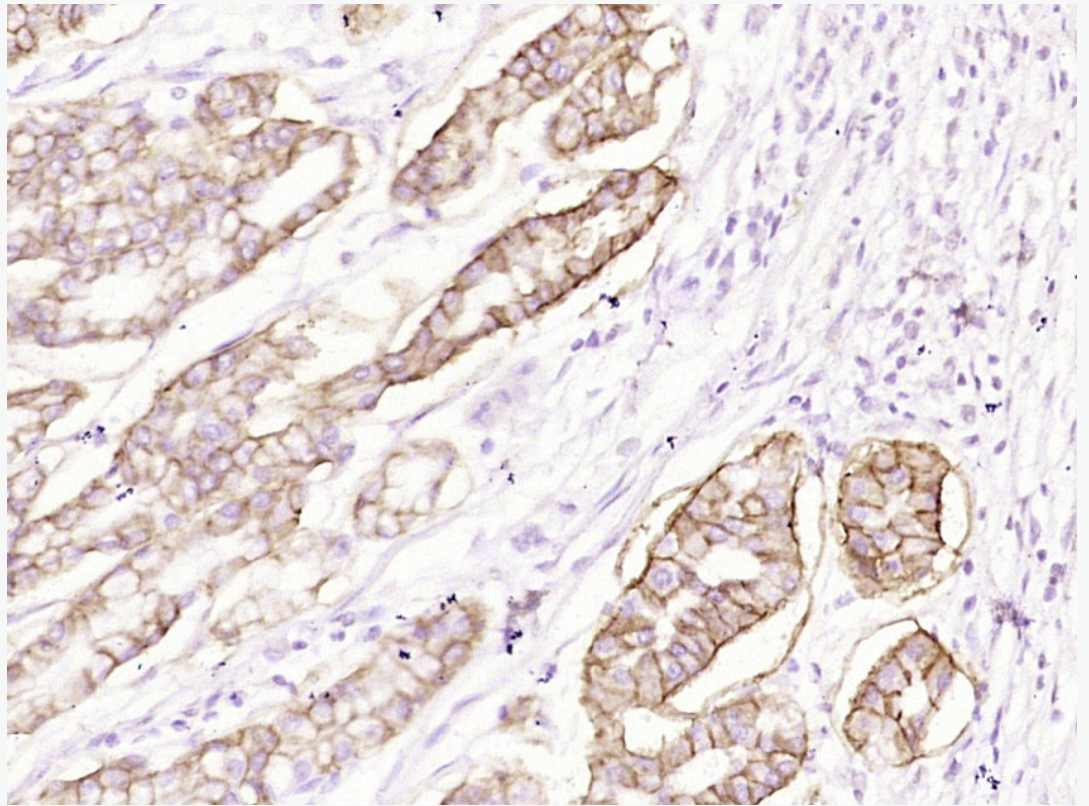
[SwissProt: Q8VHB5](#) Mouse

[Unigene: 63287](#) Human

[Unigene: 283682](#) Mouse

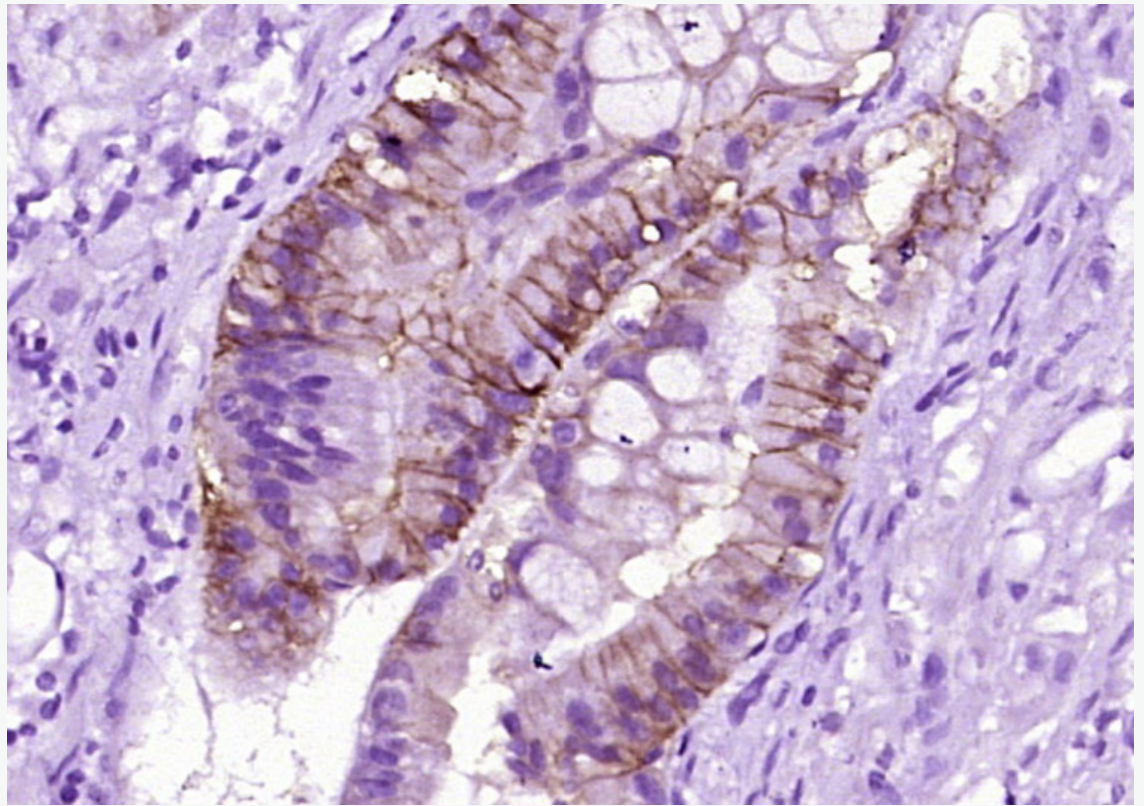
碳酸酐酶 9 (carbonic anhydrase IX, CA IX) 是新发现的碳酸酐酶家族异构体之一, 是由酸性氨基酸组成的跨膜 glycoprotein, 在调控细胞增殖、转化方面有重要作用。碳酸酐酶 9 能催化 CO₂ 水解为碳酸和水, 参与机体的酸碱平衡, 调节细胞内外 pH 值, 易导致 Tumour 的生长和转移, 目前也是子宫 Tumour 新的标记物。

**Product
Picture**



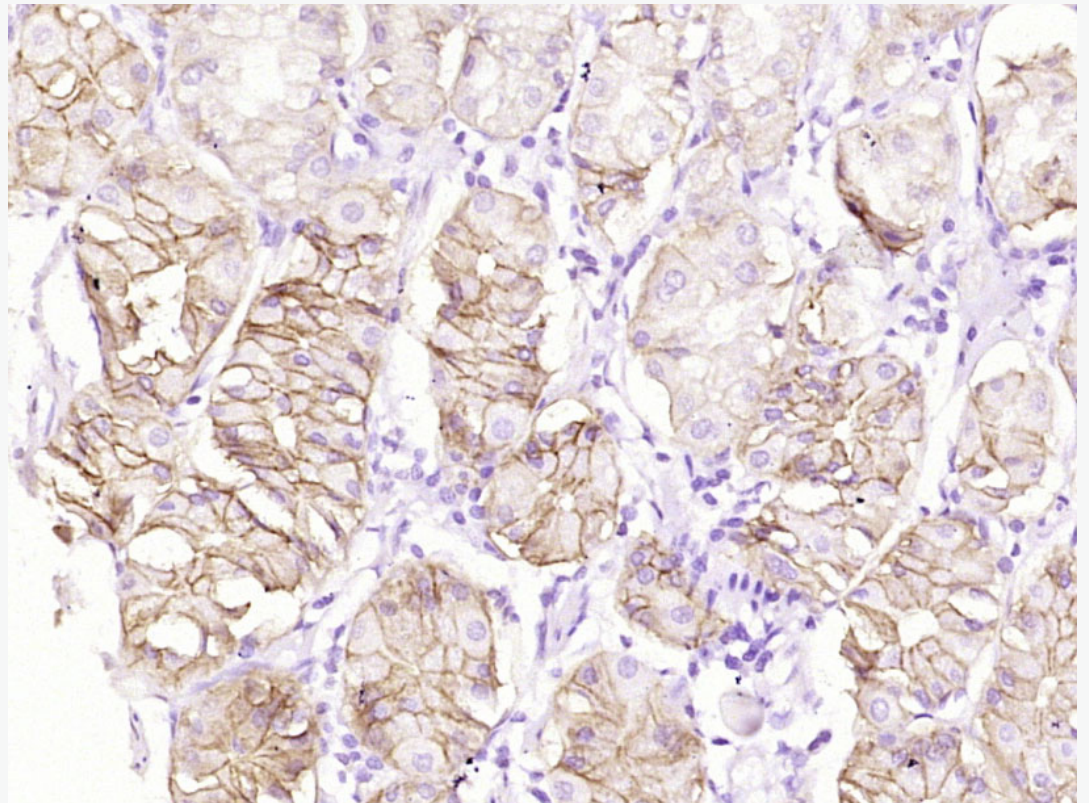
Paraformaldehyde-fixed, paraffin embedded (Human stomach cancer); Antigen

retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Carbonate dehydratase IX) Monoclonal Antibody, Unconjugated (SLM-33082M) at 1:800 overnight at 4°C, followed by operating according to SP Kit(Mouse) (sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat

serum) at 37°C for 30min; Antibody incubation with (Carbonate dehydratase IX) Monoclonal Antibody, Unconjugated (ascites of SLM-33082M) at 1:2000 overnight at 4°C, followed by a conjugated secondary (sp-0024) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Carbonate dehydratase IX) Monoclonal Antibody, Unconjugated (SLM-33082M) at 1:800 overnight at 4°C, followed by operating according to SP Kit(Mouse) (sp-0024) instructions and DAB staining.



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