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CA1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1187a

Specification

CA1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P00915
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**

Description
CA1: carbonic anhydrase I. 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. CA1 is closely linked to CA2 and CA3 genes on chromosome 8, and it encodes a cytosolic protein which is found at the highest level in erythrocytes. Transcript variants of CA1 utilizing alternative polyA_sites have been described in literature.

Immunogen
Purified recombinant fragment of CA1 (aa25-90) expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

CA1 Antibody - Additional Information

Gene ID 759

Other Names
Carbonic anhydrase 1, 4.2.1.1, Carbonate dehydratase I, Carbonic anhydrase B, CAB, Carbonic anhydrase I, CA-I, CA1

Dilution
WB~~1/500 - 1/2000
IHC~~1:200~~1000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CA1 Antibody - Protein Information

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Name CA1

Function
Catalyzes the reversible hydration of carbon dioxide (PubMed:10550681, PubMed:18618712, PubMed:16807956, PubMed:16686544, PubMed:17127057, PubMed:19186056, PubMed:19206230, PubMed:16506782, PubMed:17314045, PubMed:17407288). Can hydrate cyanamide to urea (PubMed:10550681).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:B0BNN3}.

CA1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CA1 Antibody - Images

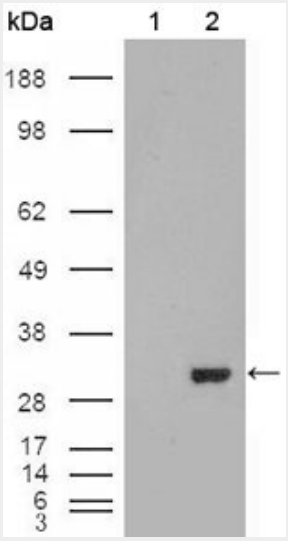


Figure 1: Western blot analysis using CA1 mouse mAb against HEK293T cells transfected with the

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pCMV6-ENTRY control (1) and pCMV6-ENTRY CA1 cDNA (2).

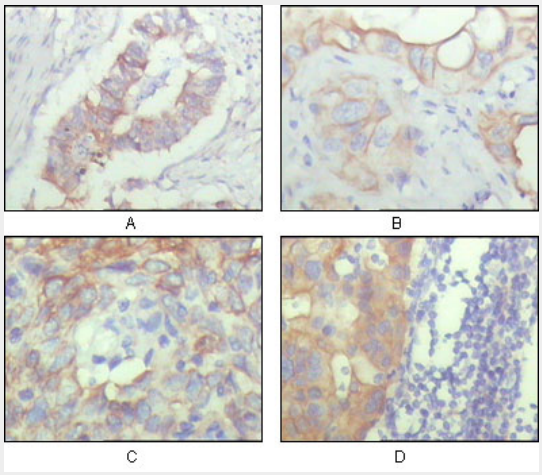


Figure 1: Immunohistochemical analysis of paraffin-embedded human ovary carcinoma (A), kidney carcinoma (B), lung carcinoma (C) and breast carcinoma (D), showing cytoplasmic and membrane localization with DAB staining using ALCAM mouse mAb.

CA1 Antibody - References

1. Res Exp Med (Berl). 1998 Dec;198(4):175-85. 2. Drugs Exp Clin Res. 2001;27(2):53-60.

CA1 Antibody - Citations

- Prognostic significance of ALCAM (CD166/MEMD) expression in cutaneous melanoma patients.