

# Datasheet for ABIN3043766

# anti-CA1 antibody (AA 9-261)





#### Overview

Quantity:	100 μg
Target:	CA1
Binding Specificity:	AA 9-261
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CA1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

### **Product Details**

Purpose:	Anti-Carbonic Anhydrase I/CA1 Antibody Picoband®
Immunogen:	E.coli-derived human CA1 recombinant protein (Position: D9-F261). Human CA1 shares 78.5% and 81% amino acid (aa) sequence identity with mouse and rat CA1, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Carbonic Anhydrase I/CA1 Antibody Picoband® (ABIN3043766). Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

## **Product Details** Purification: Immunogen affinity purified. **Target Details** Target: CA1 Alternative Name CA1 (CA1 Products) Background: Synonyms: Carbonic anhydrase 1,4.2.1.1, Carbonate dehydratase I, Carbonic anhydrase B,CAB,Carbonic anhydrase I,CA-I,CA1, Tissue Specificity: Highly expressed in fetal lung, and kidney. In the adult, expression is mainly seen in lymphoid tissues, including spleen, thymus and peripheral blood lymphocytes. Background: Carbonic anhydrase 1 is an enzyme that in humans is encoded by the CA1 gene. It is a member of the Carbonic anhydrase. The CA1 gene is mapped to 8q22. CAI has got about 260 amino acids. This protein is highly expressed in erythrocytes. As catalysts of the reversible hydration of carbon dioxide, CAI participates in a variety of biologic processes like respiration, calcification, acid-base balance etc. Sequence Similarities: Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily. Molecular Weight: 29 kDa Gene ID: 759 UniProt: P00915 **Application Details Application Notes:** Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/mL, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10<sup>6</sup> cells, Human 1. Lowe N, Edwards YH, Edwards M, Butterworth PH (Nov 1991). "Physical mapping of the human carbonic anhydrase gene cluster on chromosome 8". Genomics 10 (4): 882-8. 2. "Entrez Gene: CA1 carbonic anhydrase I". Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

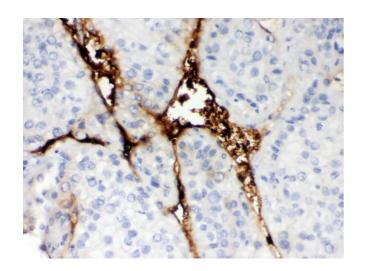
For Research Use only

Restrictions:

### Handling

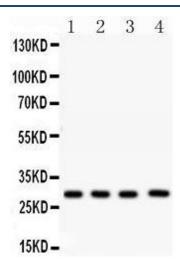
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 $\mu g/mL$ .
Concentration:	500 μg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

### **Images**



### Immunohistochemistry

**Image 1.** Anti-CA1 Picoband antibody, IHC(P) IHC(P): Human Liver Cancer Tissue



#### **Western Blotting**

Image 2.