

## **Anti-CA3 Picoband Antibody**

Catalog # ABO11667

## **Specification**

# Anti-CA3 Picoband Antibody - Product Information

Application WB, IHC
Primary Accession P07451
Host Rabbit

Reactivity Human, Mouse,

Rat

Clonality Polyclonal Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Carbonic anhydrase 3(CA3) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

#### Reconstitution

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

Anti-CA3 Picoband Antibody - Additional Information

# Gene ID 761

## **Other Names**

Carbonic anhydrase 3, 4.2.1.1, Carbonate dehydratase III, Carbonic anhydrase III, CA-III, CA3

Calculated MW 29557 MW KDa

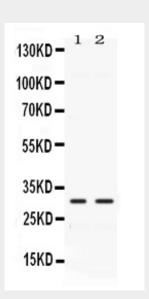
## **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Mouse, Rat, By Heat<br/>br> <br/>br> Western blot, 0.1-0.5 μg/ml, Mouse, Rat, Human<br/>br>

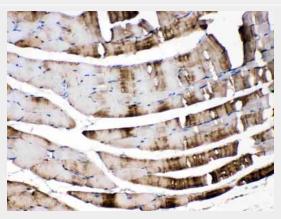
**Subcellular Localization** Cytoplasm.

**Tissue Specificity** Muscle specific.

**Protein Name**Carbonic anhydrase 3



Western blot analysis of CA3 expression in rat cardiac muscle extract (lane 1) and mouse cardiac muscle extract (lane 2). CA3 at 29KD was detected using rabbit anti- CA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11667) at 0.5  $\hat{l}\frac{1}{4}$ g/mL. The blot was developed using chemiluminescence (ECL) method .



CA3 was detected in paraffin-embedded sections of mouse skeletal muscle tissues using rabbit anti- CA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11667) at 1  $^{1}$ / $^{4}$ g/mL. The immunohistochemical section was developed using SABC method .



#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

## **Immunogen**

E. coli-derived human CA3 recombinant protein (Position: D14-E235). Human CA3 shares 92.3% and 91.4% amino acid (aa) sequence identity with mouse and rat CA3, respectively.

## **Purification**

Immunogen affinity purified.

## **Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Anti-CA3 Picoband Antibody - Protein Information** 

Name CA3

## **Function**

Reversible hydration of carbon dioxide.

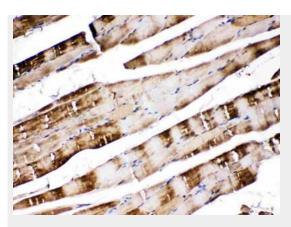
Cellular Location Cytoplasm.

**Tissue Location** Muscle specific.

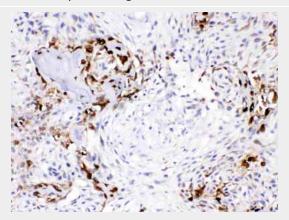
### **Anti-CA3 Picoband Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety



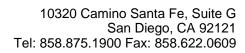
CA3 was detected in paraffin-embedded sections of rat skeletal muscle tissues using rabbit anti- CA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11667) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .



CA3 was detected in paraffin-embedded sections of human osteosarcoma tissues using rabbit anti- CA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11667) at 1  $\hat{l}^{1}/_{4}$ g/mL. The immunohistochemical section was developed using SABC method .

# **Anti-CA3 Picoband Antibody - Background**

Carbonic anhydrase III (CA3) is an enzyme that in humans is encoded by the CA3 gene. CA3 is a member of a multigene family (at least six separate genes are known) that encode carbonic anhydrase isozymes. The gene spans 10.3 kb and contains seven exons and six introns. Using a cDNA clone of the CA3 gene in the study of human-rodent hybrids, the gene was mapped to chromosome 8 which carries a cluster of CA genes. The expression of the CA3 gene is strictly tissue specific and present at high levels in skeletal muscle and





• Cell Culture

much lower levels in cardiac and smooth muscle. A proportion of carriers of Duchenne muscle dystrophy have a higher CA3 level than normal.