

Anti-CA3 Picoband Antibody
Catalog # ABO11667**Specification**

Anti-CA3 Picoband Antibody - Product Information

Application	WB, IHC-P
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
Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization

Cytoplasm.

Tissue Specificity

Muscle specific.

Protein Name

Carbonic anhydrase 3

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 reconstitution, 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 {ECO:0000303|PubMed:9651514, ECO:0000312|HGNC:HGNC:1374}

Function

Reversible hydration of carbon dioxide.

Cellular Location

Cytoplasm.

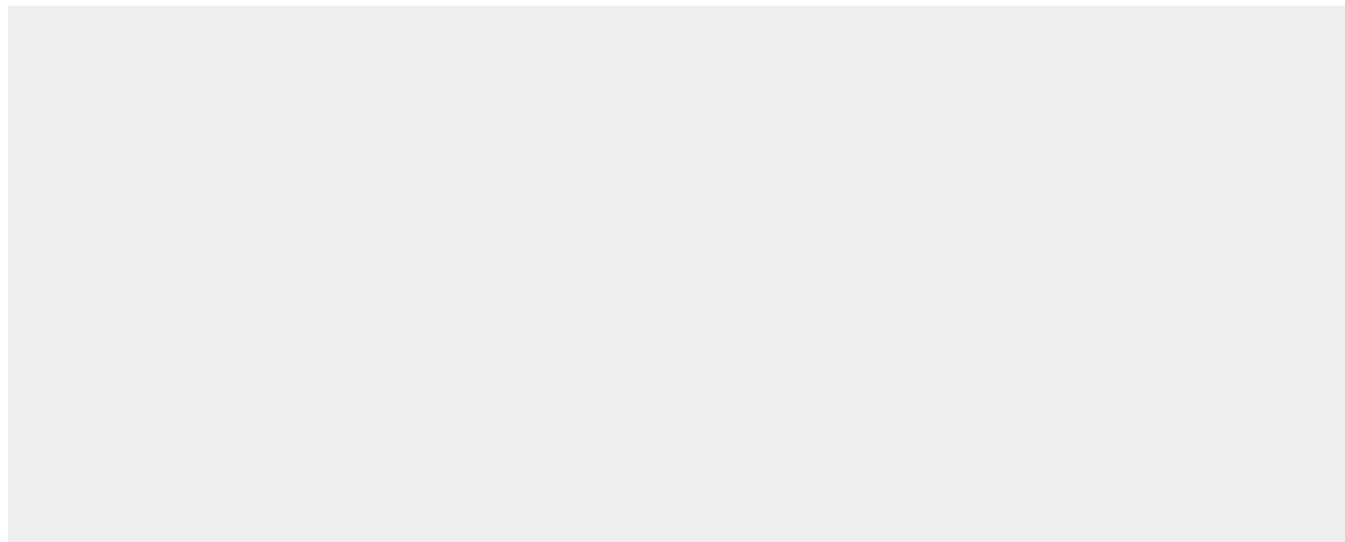
Tissue Location

Muscle specific.

Anti-CA3 Picoband Antibody - Protocols

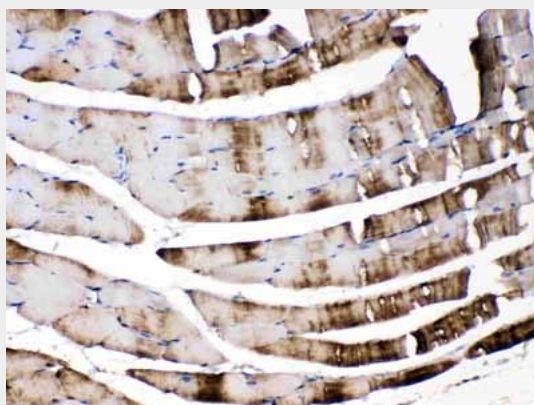
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

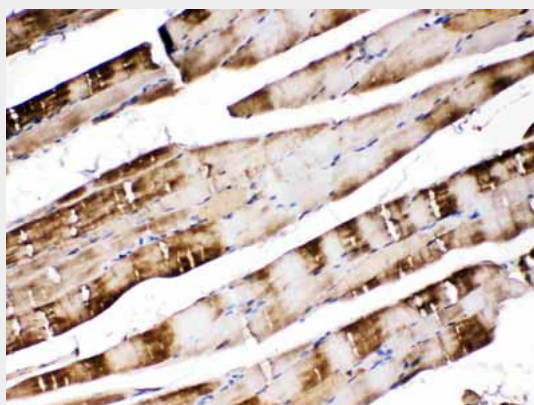
Anti-CA3 Picoband Antibody - Images



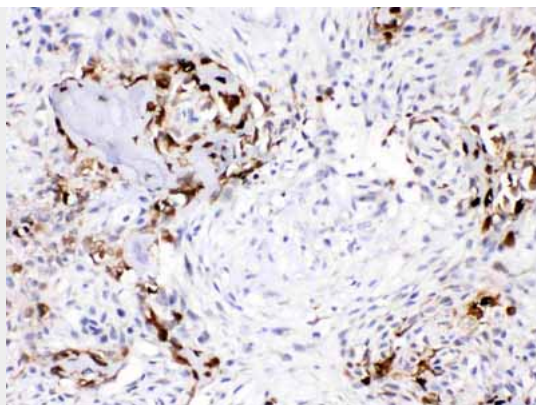
Western blot analysis of CA3 expression in rat cardiac muscle extract (lane 1) and mouse cardiac muscle extract (lane 2). CA3 at 29KD was detected using rabbit anti- CA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11667) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) 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 μ g/mL. The immunohistochemical section was developed using SABC method .



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