

Anti-CA3 Picoband Antibody

Catalog # ABO11667

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Mouse, Rat, Human
Subcellular Localization	Cytoplasm.
Tissue Specificity	Muscle specific.
Source	Eukaryota
Protein Name	Carbonic anhydrase 3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.
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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.

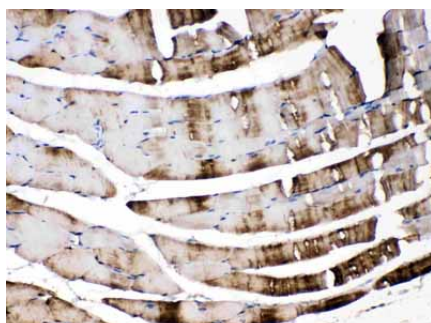
Background

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.

Images

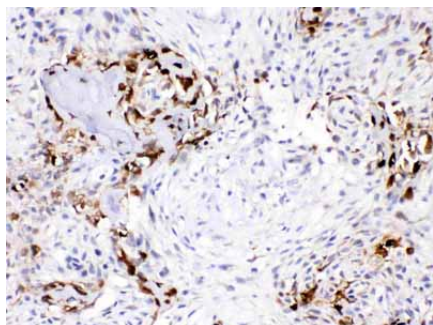
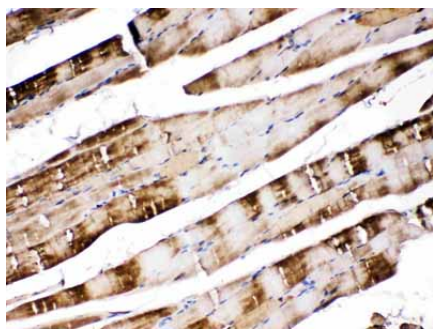


Western blot analysis of CA3 expression in rat cardiac muscle extract (lane 1) and mouse cardiac muscle extract (lane 2). CA3 at 29KD was detected using rabbit anti- CA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11667) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL)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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.