

Datasheet for ABIN3043222
anti-CA3 antibody (N-Term)



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2 Images

Overview

Quantity:	100 µg
Target:	CA3
Binding Specificity:	AA 2-20, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CA3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Anti-Carbonic Anhydrase III/CA3 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human CA3, different from the related mouse and rat sequences by two amino acids.
Sequence:	AKEWGYASHN GPDHWHELF
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Carbonic Anhydrase III/CA3 Antibody (ABIN3043222). Tested in IHC, 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: CA3

Alternative Name: CA3 ([CA3 Products](#))

Background: Synonyms: Carbonic anhydrase 3,4.2.1.1,Carbonate dehydratase III,Carbonic anhydrase III,CA-III,CA3,
Tissue Specificity: 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. CA3 is found in high concentration in muscle. CA3 is used in conjunction with creatine kinase detection of the carrier state for Duchenne muscular dystrophy.
Sequence Similarities: Belongs to the Bcl-2 family.

Molecular Weight: 23 kDa

UniProt: [P07451](#)

Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat
Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Human, Mouse, Rat
1. Edwards, Y. H., Lloyd, J. C., Parkar, M., Povey, S. The gene for human muscle specific carbonic anhydrase (CAIII) is assigned to chromosome 8. Ann. Hum. Genet. 50: 41-47, 1986. 2. Heath, R., Carter, N. D., Jeffery, S., Edwards, R. J., Watts, D. C., Watts, R. L. Evaluation of carrier detection of Duchenne muscular dystrophy using carbonic anhydrase III and creatine kinase. Am. J. Med. Genet. 21: 291-296, 1985. 3. Wade, R., Gunning, P., Eddy, R., Shows, T., Kedes, L. Nucleotide sequence, tissue-specific expression, and chromosome location of human carbonic anhydrase III: the human CAIII gene is located on the same chromosome as the closely linked CAI and CAII genes. Proc. Nat. Acad. Sci. 83: 9571-9575, 1986.

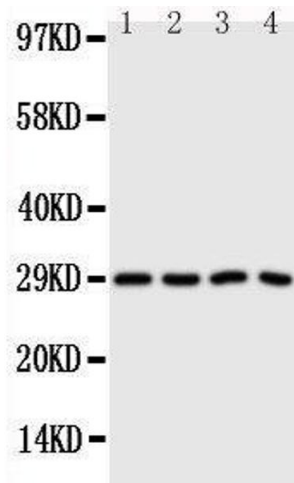
Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

Handling

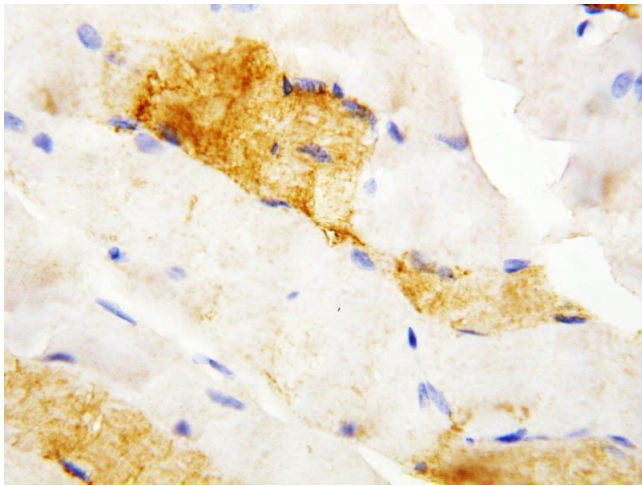
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Thimerosal (Merthiolate) and Sodium azide: POISONOUS AND HAZARDOUS SUBSTANCES 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.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Anti-Carbonic Anhydrase III antibody, Western blotting Lane 1: SMMC Cell Lysate Lane 2: HELA Cell Lysate Lane 3: SW620 Cell Lysate Lane 4: SCG Cell Lysate



Immunohistochemistry

Image 2. Anti-Carbonic Anhydrase III antibody, IHC(P)
IHC(P): Rat Skeletal Muscle Tissue