

## CA3 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full-length recombinant CA3.

Catalog # AT1357a

### Product Information

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<b>Application</b>	WB, IHC, E
<b>Primary Accession</b>	<a href="#">P07451</a>
<b>Other Accession</b>	<a href="#">BC004897</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1 kappa
<b>Clone Names</b>	4A12-1A3
<b>Calculated MW</b>	29557

### Additional Information

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<b>Gene ID</b>	761
<b>Other Names</b>	Carbonic anhydrase 3, Carbonate dehydratase III, Carbonic anhydrase III, CA-III, CA3
<b>Target/Specificity</b>	CA3 (AAH04897, 1 a.a. ~ 260 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	CA3 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

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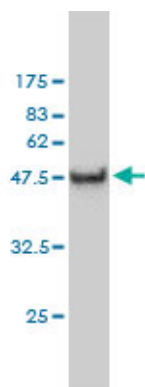
Carbonic anhydrase III (CAIII) is a member of a multigene family (at least six separate genes are known) that encodes carbonic anhydrase isozymes. These carbonic anhydrases are a class of metalloenzymes that catalyze the reversible hydration of carbon dioxide and are differentially expressed in a number of cell types. 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. The gene spans 10.3 kb and contains seven exons and six introns.

### References

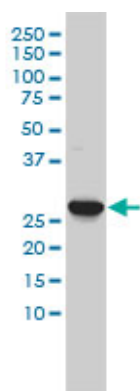
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1. Proteomic profiling of antisense-induced exon skipping reveals reversal of pathobiochemical abnormalities in dystrophic mdx diaphragm. Doran P, Wilton SD, Fletcher S, Ohlendieck K. Proteomics. 2009 Feb;9(3):671-85.

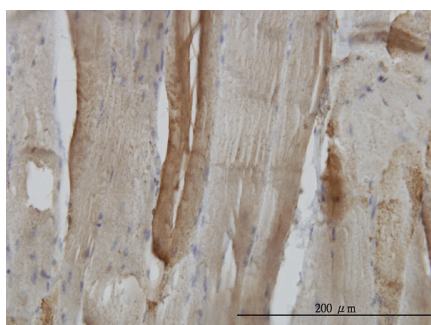
## Images



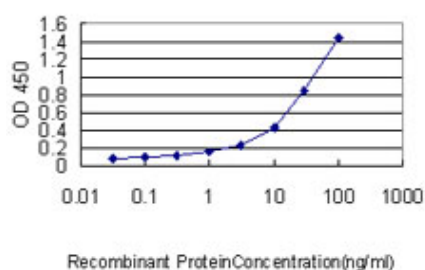
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (54.34 KDa) .



CA3 monoclonal antibody (M02), clone 4A12-1A3 Western Blot analysis of CA3 expression in K-562 ( (Cat # AT1357a )



Immunoperoxidase of monoclonal antibody to CA3 on formalin-fixed paraffin-embedded human skeletal muscle. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged CA3 is approximately 1 ng/ml as a capture antibody.

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