

For Research Use Only

# CA3 Monoclonal antibody, PBS Only

Catalog Number: 66608-1-PBS



## Basic Information

Catalog Number:

66608-1-PBS

Size:

1 mg/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG7513

GenBank Accession Number:

BC004897

GeneID (NCBI):

761

UNIPROT ID:

P07451

Full Name:

carbonic anhydrase III, muscle specific

Calculated MW:

29 kDa

Observed MW:

29 kDa

Purification Method:

Protein A purification

CloneNo.:

3C10A2

## Applications

Tested Applications:

WB, IF, IHC, Indirect ELISA

Species Specificity:

Human, Mouse, Rat, Pig

## Background Information

Carbonic anhydrase III (CA3), which belongs to the alpha-carbonic anhydrase family, is a cytoplasmic enzyme that exhibits a relatively low carbon dioxide hydratase activity. It is expressed at a very high level in skeletal muscle, where physical exercise has been shown to increase free radical production. In addition to its carbon dioxide hydratase activity, CA3 has been demonstrated to have a carboxyl esterase activity and phosphatase activity, which suggests that it is a tyrosine phosphatase (PMID: 10064618). CA3 was found to be localized in Type-I muscle fibers and could be used as a marker for abnormal Type-I muscle fibers in several neuromuscular diseases (PMID: 6221502).

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

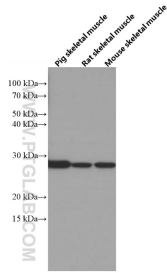
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

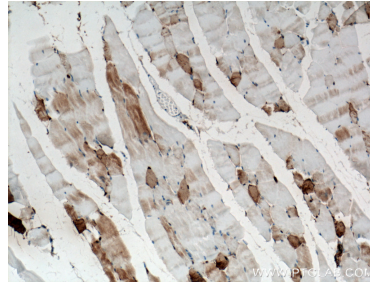
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

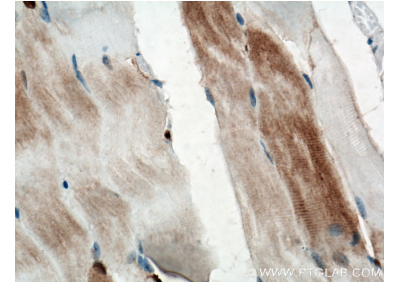
## Selected Validation Data



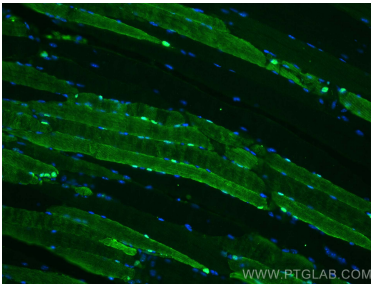
Various lysates were subjected to SDS PAGE followed by western blot with 66608-1-Ig (CA3 antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66608-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 66608-1-Ig (CA3 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66608-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 66608-1-Ig (CA3 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66608-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse skeletal muscle tissue using CA3 antibody (66608-1-Ig, Clone: 3C10A2) at dilution of 1:400 and CoralLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66608-1-PBS in a different storage buffer formulation.