For Research Use Only

CoraLite® Plus 488-conjugated CA3 Polyclonal antibody



Catalog Number: CL488-15197

Featured Product

Basic Information

Catalog Number: CL488-15197

1000 µg/ml Source:

Rabbit Isotype:

Immunogen Catalog Number:

Species Specificity: human, mouse, rat

GenBank Accession Number:

BC004897 GeneID (NCBI):

UNIPROT ID: P07451 Full Name:

carbonic anhydrase III, muscle

specific

29 kDa

Calculated MW:

Observed MW: 30 kDa

Purification Method:

Antigen affinity purification Recommended Dilutions:

IF-P 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

Positive Controls:

IF-P: mouse skeletal muscle tissue,

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

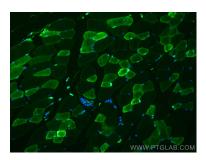
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse skeletal muscle tissue using CoraLite® Plus 488 CA3 antibody (CL488-15197) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).