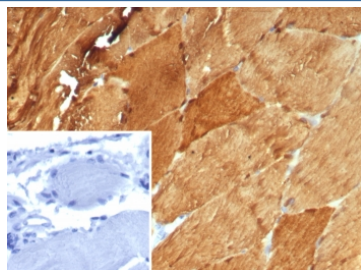


## CA3 Antibody / Carbonic Anhydrase III [clone CA3/7885] (V5252)

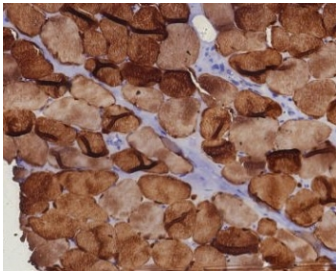
Catalog No.	Formulation	Size
V5252-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5252-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5252SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

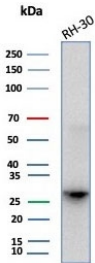
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	CA3/7885
<b>Purity</b>	Protein A/G affinity
<b>UniProt</b>	P07451
<b>Localization</b>	Cytoplasm
<b>Applications</b>	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
<b>Limitations</b>	This CA3 antibody is available for research use only.



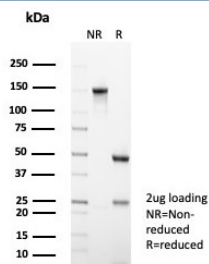
IHC staining of FFPE human skeletal muscle tissue with CA3 antibody (clone CA3/7885). Inset: PBS used in place of primary Ab (secondary Ab negative control).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human skeletal muscle tissue with CA3 antibody (clone CA3/7885). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human RH30 cell lysate with CA3 antibody (clone CA3/7885). Predicted molecular weight ~29 kDa.



SDS-PAGE analysis of purified, BSA-free CA3 antibody (clone CA3/7885) as confirmation of integrity and purity.

## Description

Carbonic anhydrases (CAs) are members of a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. CAs are involved in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric juice. They show extensive diversity in distribution and in their subcellular localization. CA III (carbonic anhydrase III), also known as Car3 or CA3, is a 260 amino acid cytoplasmic protein that is specifically expressed in muscle. Belonging to the  $\alpha$ -carbonic anhydrase family, CA III is activated by proton donors such as imidazole and dipeptide histidylhistidine, and is inhibited by coumarins and sulfonamide derivatives such as acetazolamide.

## Application Notes

Optimal dilution of the CA3 antibody should be determined by the researcher.

## Immunogen

A recombinant fragment of human CA3 protein was used as the immunogen for the CA3 antibody.

## Storage

Aliquot the CA3 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.

