abcam

Product datasheet

Anti-Carbonic Anhydrase 3/CA3 antibody ab150037

2 Images

Overview

Product name Anti-Carbonic Anhydrase 3/CA3 antibody

Description Rabbit polyclonal to Carbonic Anhydrase 3/CA3

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Chimpanzee, Macaque monkey, Chinese hamster, Orangutan

Immunogen Synthetic peptide corresponding to Human Carbonic Anhydrase 3/CA3 aa 1-100 conjugated to

keyhole limpet haemocyanin. (Peptide available as <u>ab136233</u>)

Positive control

This antibody gave a positive signal in Recombinant Carbonic anhydrase 3 protein as well as the

following tissue lysates: Human Skeletal Muscle; Mouse Skeletal Muscle; Rat Skeletal Muscle. It

also gave a positive result in FFPE human skeletal muscle tissue sections.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

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Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab150037 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 32 kDa (predicted molecular weight: 29 kDa).
IHC-P		Use a concentration of 0.5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

Function Reversible hydration of carbon dioxide.

Tissue specificity Muscle specific.

Sequence similaritiesBelongs to the alpha-carbonic anhydrase family.

Developmental stage At 6 weeks gestation, transcripts accumulate at low levels in the somites and at high levels

throughout the notochord. As gestation continues, CA3 becomes abundant in all developing

muscle masses and continues at high to moderate levels in the notochord.

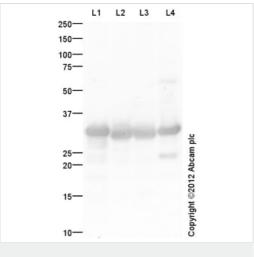
Post-translational

modifications

S-glutathionylated in hepatocytes under oxidative stress.

Cellular localization Cytoplasm.

Images



Western blot - Anti-Carbonic Anhydrase 3/CA3 antibody (ab150037)

All lanes : Anti-Carbonic Anhydrase 3/CA3 antibody (ab150037) at 1 µg/ml

Lane 1: Human skeletal muscle tissue lysate - total protein

Lane 2: Skeletal Muscle (Mouse) Tissue Lysate

Lane 3 : Skeletal Muscle (Rat) Tissue Lysate

Lane 4: Carbonic Anhydrase III/CA3 protein

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 29 kDa **Observed band size:** 32 kDa

Additional bands at: 24 kDa, 58 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 30 seconds

IHC image of Carbonic Anydrase III staining in human skeletal muscle formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab150037, 0.5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Carbonic Anhydrase 3/CA3 antibody (ab150037)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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