

Product datasheet

Anti-Adenine Nucleotide Translocase Immunocapture antibody [5F51BB5AG7] ab109864

[5 References](#) [2 Images](#)

Overview

Product name	Anti-Adenine Nucleotide Translocase Immunocapture antibody [5F51BB5AG7]
Description	Mouse monoclonal [5F51BB5AG7] to Adenine Nucleotide Translocase Immunocapture
Host species	Mouse
Tested applications	Suitable for: IP, IHC-P
Species reactivity	Reacts with: Cow, Human
Immunogen	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
Positive control	Bovine and Human heart mitochondria This antibody gave a positive result in IHC in the following FFPE tissue: Human normal heart muscle.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The 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.</p> <p>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</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	<p>pH: 7.5</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: HEPES buffered saline</p>
Purification notes	ab109864 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.

Clonality	Monoclonal
Clone number	5F51BB5AG7
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109864 in the following tested applications.

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

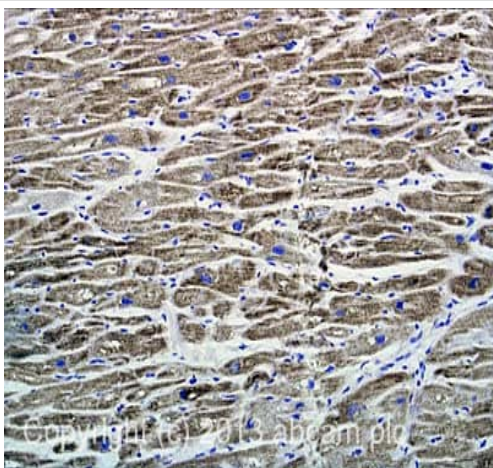
Application	Abreviews	Notes
IP		Use at 100 µg/mg of lysate.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Relevance ANT is a reversible transporter of ATP and ADP. During oxidative phosphorylation (OXPHOS) the protein exchanges ATP out for ADP in, however, in the absence of OXPHOS ANT works in reverse to maintain mitochondrial membrane potential. A subset of patients with heart related diseases have been shown to harbor mutations in the ANT gene or to develop an autoimmune reaction against the protein. There are a number of proteins found in mitochondria that, under circumstances favoring apoptosis, coalesce to form the so-called permeability transition pore. The proteins identified as a part of the PTP include cytosolic hexokinase, outer membrane porin (also called the voltage dependent anion channel or VDAC), adenylate cyclase in the intermembrane space, the adenine nucleotide transporter (ANT) and the peripheral benzodiazepine receptor protein of the inner membrane along with cyclophilin D of the matrix space. Hexokinase, porin and ANT all occur as isoforms and it remains to be determined whether there is specificity of these different forms for the PTP.

Cellular localization Mitochondrial

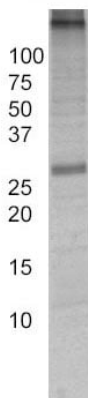
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Adenine Nucleotide Translocase Immunocapture antibody [5F51BB5AG7] (ab109864)

IHC image of Adenine Nucleotide Translocase staining in Human normal heart muscle formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ 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 ab109864, 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.



Immunoprecipitation - Anti-Adenine Nucleotide Translocase Immunocapture antibody [5F51BB5AG7] (ab109864)

Immunoprecipitation of Adenine Nucleotide Translocase from Bovine heart mitochondria using ab109864 at a concentration of 100 µg/mg lysate.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors