



Product datasheet

Anti-NMRAL1 antibody ab272637

3 Images

Overview

Product name	Anti-NMRAL1 antibody
Description	Rabbit polyclonal to NMRAL1
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to Human NMRAL1 aa 1-150. Database link: Q9HBL8
	<div>  Run BLAST with  Run BLAST with </div>
Positive control	WB: HEK-293T lysate. IHC-P: Human rectum tissue. ICC/IF: MCF7.
General notes	<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>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab272637 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
ICC/IF		Use a concentration of 0.25 - 2 µg/ml.
WB		Use a concentration of 0.04 - 0.4 µg/ml.
IHC-P		1/50 - 1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Redox sensor protein. Undergoes restructuring and subcellular redistribution in response to changes in intracellular NADPH/NADP(+) levels. At low NADPH concentrations the protein is found mainly as a monomer, and binds argininosuccinate synthase (ASS1), the enzyme involved in nitric oxide synthesis. Association with ASS1 impairs its activity and reduces the production of nitric oxide, which subsequently prevents apoptosis. Under normal NADPH concentrations, the protein is found as a dimer and hides the binding site for ASS1. The homodimer binds one molecule of NADPH. Has higher affinity for NADPH than for NADP(+). Binding to NADPH is necessary to form a stable dimer.

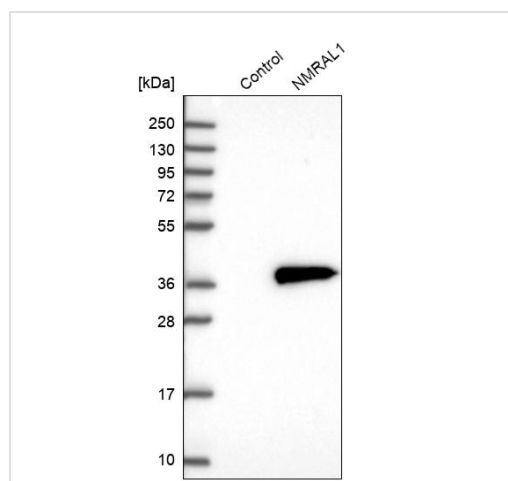
Sequence similarities

Belongs to the NmrA-type oxidoreductase family.

Cellular localization

Cytoplasm. Cytoplasm > perinuclear region. Nucleus. Under normal redox growth conditions localizes in the cytoplasm and perinuclear region. Nuclear localization is promoted by increased intracellular nitric oxide and reduced NADPH/NADP(+) ratios.

Images

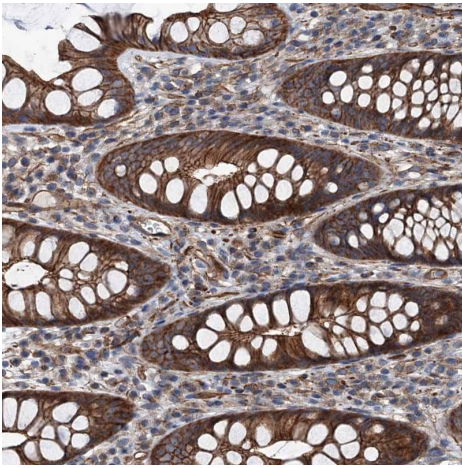


Western blot - Anti-NMRAL1 antibody (ab272637)

All lanes : Anti-NMRAL1 antibody (ab272637) at 0.4 µg/ml

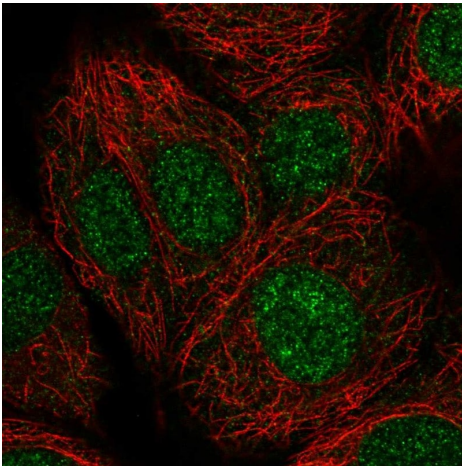
Lane 1 : Control (vector only transfected HEK-293T lysate)

Lane 2 : NMRAL1 over-expression lysate (mammalian HEK-293T cells)



Paraffin-embedded formalin-fixed Human rectum tissue stained for NMRAL1 using ab272637 at 1/200 in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NMRAL1 antibody (ab272637)



PFA fixed, Triton X-100 permeabilized human cell line MCF7 labeling NMRAL1 (green) using ab272637 at 2 ug/ml in ICC/IF analysis.

Immunocytochemistry/ Immunofluorescence - Anti-NMRAL1 antibody (ab272637)

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

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