



Product datasheet

Anti-Nmnat1/NMNAT antibody [OT11F7] ab118270

2 Images

Overview

Product name	Anti-Nmnat1/NMNAT antibody [OT11F7]
Description	Mouse monoclonal [OT11F7] to Nmnat1/NMNAT
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human, African green monkey
Immunogen	Recombinant full length protein corresponding to Human Nmnat1/NMNAT aa 1 to the C-terminus. Produced in HEK-293T cells (NP_073624). Database link: Q9HAN9  Run BLAST with  Run BLAST with
Positive control	WB: Nmnat1/NMNAT transfected HEK-293T cell lysate. ICC/IF: COS-7 cells transiently transfected with Nmnat1/NMNAT.
General notes	Clone OT11F7 (formerly 1F7). 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. 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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA, 50% Glycerol
Purity	Affinity purified
Purification notes	Purified from cell culture supernatant by affinity chromatography.
Clonality	Monoclonal

Clone number OT11F7

Isotype IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab118270 in the following tested applications.

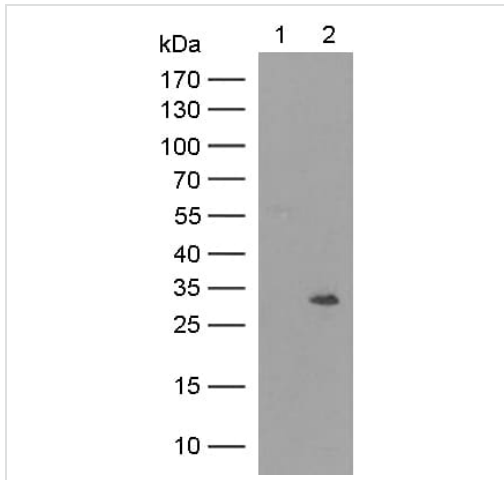
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000. Predicted molecular weight: 31 kDa.
ICC/IF		1/100.

Target

Function	Catalyzes the formation of NAD(+) from nicotinamide mononucleotide (NMN) and ATP (PubMed:17402747). Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate with the same efficiency (PubMed:17402747). Can use triazofurin monophosphate (TrMP) as substrate (PubMed:17402747). Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+) (PubMed:17402747). For the pyrophosphorolytic activity, prefers NAD(+) and NaAD as substrates and degrades NADH, nicotinic acid adenine dinucleotide phosphate (NAD) and nicotinamide guanine dinucleotide (NGD) less effectively (PubMed:17402747). Involved in the synthesis of ATP in the nucleus, together with PARP1, PARG and NUDT5 (PubMed:27257257). Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming (PubMed:27257257). Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+) (PubMed:17402747). Protects against axonal degeneration following mechanical or toxic insults.
Tissue specificity	Widely expressed with highest levels in skeletal muscle, heart and kidney. Also expressed in the liver pancreas and placenta. Widely expressed throughout the brain.
Pathway	Cofactor biosynthesis; NAD(+) biosynthesis; NAD(+) from nicotinamide D-ribonucleotide: step 1/1. Cofactor biosynthesis; NAD(+) biosynthesis; deamido-NAD(+) from nicotinate D-ribonucleotide: step 1/1.
Involvement in disease	Leber congenital amaurosis 9
Sequence similarities	Belongs to the eukaryotic NMN adenylyltransferase family.
Cellular localization	Nucleus.

Images



Western blot - Anti-Nmnat1/NMNAT antibody [OT11F7] (ab118270)

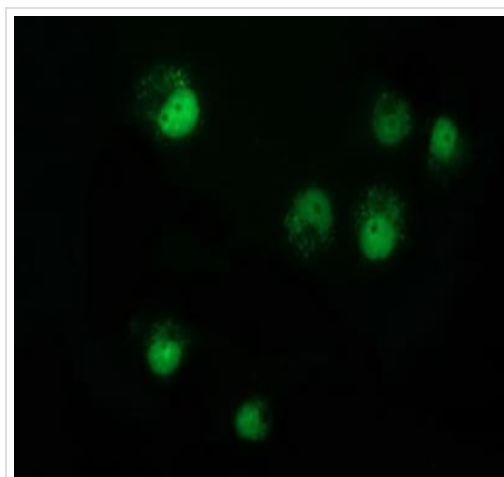
All lanes : Anti-Nmnat1/NMNAT antibody [OT11F7] (ab118270) at 1/2000 dilution

Lane 1 : pCMV6-ENTRY control cDNA transfected HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate

Lane 2 : pCMV6-ENTRY Nmnat1/NMNAT cDNA transfected HEK-293T cell lysate

Lysates/proteins at 5 µg per lane.

Predicted band size: 31 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Nmnat1/NMNAT antibody [OT11F7] (ab118270)

pCMV6-ENTRY Nmnat1/NMNAT cDNA transfected COS-7 (African green monkey kidney fibroblast-like cell line) cells stained for Nmnat1/NMNAT using ab118270 at a 1/100 dilution in ICC/IF.

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

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