

Anti-Nac1 antibody ab29047

★★★★★ [2 Abreviews](#) [9 References](#) [5 Images](#)

Overview

Product name	Anti-Nac1 antibody
Description	Rabbit polyclonal to Nac1
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 450 to the C-terminus of Mouse Nac1. Read Abcam's proprietary immunogen policy (Peptide available as ab30604 .)
Positive control	This antibody gave a positive signal in the following lysates: F9 (Mouse embryonic carcinoma cell line) Whole Cell IOUD2 (Mouse embryonic stem cell, selected for Oct4 expression cell line) Whole Cell Brain (Rat) Tissue Lysate - normal tissue It also gave a positive result in FFPE human cerebral cortex sections.
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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>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.</p>
Purity	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

Applications

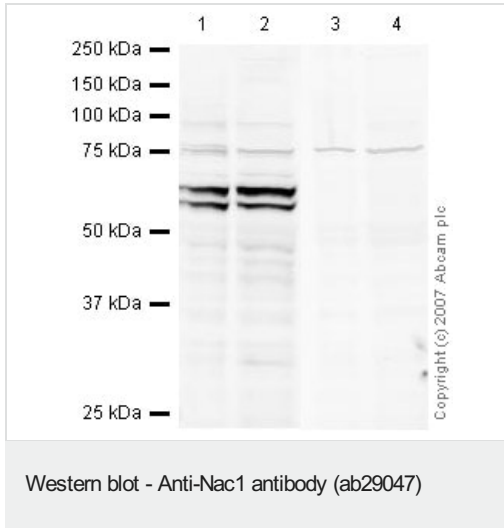
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab29047 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★★ (1)	1/250. Detects a band of approximately 57,60 kDa (predicted molecular weight: 57 kDa).
ICC/IF	★★★★★ (1)	Use a concentration of 1 µg/ml.

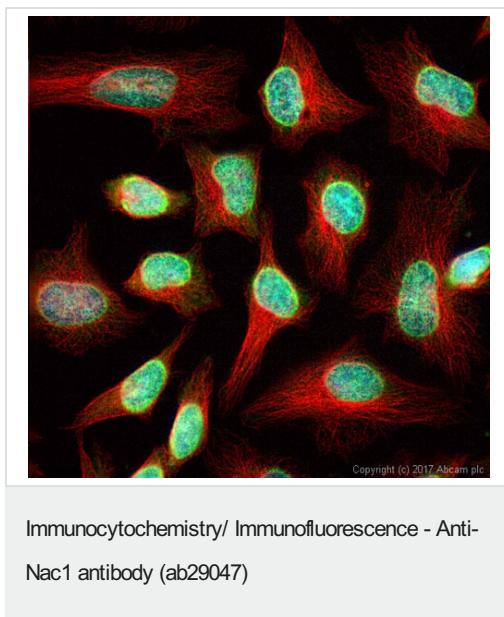
Target

Function	Functions as a transcriptional repressor. Seems to function as a transcriptional corepressor in neuronal cells through recruitment of HDAC3 and HDAC4. Contributes to tumor progression, and tumor cell proliferation and survival. This may be mediated at least in part through repressing transcriptional activity of GADD45GIP1. Required for recruiting the proteasome from the nucleus to the cytoplasm and dendritic spines.
Tissue specificity	Overexpressed in several types of carcinomas including ovarian serous carcinomas. Expression levels positively correlate with tumor recurrence in ovarian serous carcinomas, and intense immunoreactivity in primary ovarian tumors predicts early recurrence. Up-regulated in ovarian carcinomas after chemotherapy, suggesting a role in development of chemotherapy resistance in ovarian cancer.
Sequence similarities	Contains 1 BEN domain. Contains 1 BTB (POZ) domain.
Cellular localization	Nucleus. Cytoplasm. Distribution in the cytoplasm is dependent on phosphorylation.

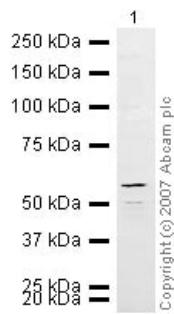
Images



We are unsure as to the nature of the doublet. It is likely that the doublet is caused by the presence of processed and unprocessed forms of Nac1. Both bands are blocked by addition of the immunizing peptide ([ab30604](#)).



ab29047 stained in HeLa cells. Cells were fixed with 4% paraformaldehyde (10min) at room temperature and incubated with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% triton for 1h at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab29047 at 1µg/ml and [ab7291](#) (Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control) at 1/1000 dilution overnight at +4°C. The secondary antibodies were [ab150120](#) (pseudo-colored red) and [ab150081](#) (colored green) used at 1 ug/ml for 1hour at room temperature. DAPI was used to stain the cell nuclei (colored blue) at a concentration of 1.43µM for 1hour at room temperature.



Western blot - Anti-Nac1 antibody (ab29047)

Anti-Nac1 antibody (ab29047) at 1/250 dilution + Brain (Rat) Tissue
Lysate - normal tissue at 10 µg

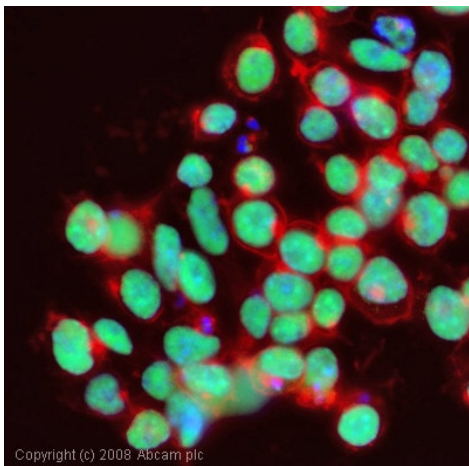
Secondary

IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000
dilution

Performed under reducing conditions.

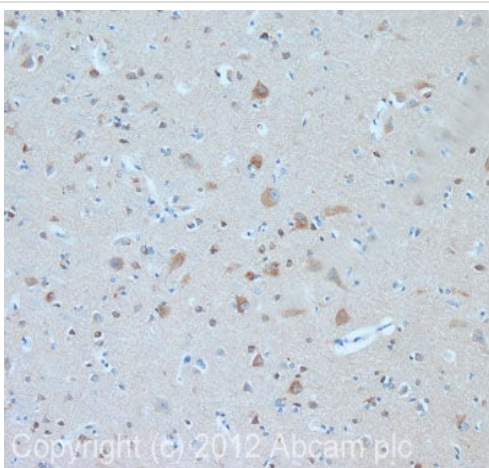
Predicted band size: 57 kDa

Observed band size: 57 kDa



Immunocytochemistry/ Immunofluorescence - Anti-
Nac1 antibody (ab29047)

ICC/IF image of ab29047 stained mouse embryonic stem cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab29047, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-Nac1 antibody (ab29047)

IHC image of Nac1 staining in human cerebral cortex 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 ab29047, 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.

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