

# **NAC1** Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54795

# **Specification**

# **NAC1 Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity

OgéRE7
Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 57 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human NAC1/BTBD14B

Epitope Specificity 311-400/527

Isotype
Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus. Cytoplasm. Distribution in the

cytoplasm is dependent on

phosphorylation.

SIMILARITY Contains 1 BEN domain. Contains 1 BTB

(POZ) domain.

SUBUNIT Homooligomer; mediated by the BTB

domain. Interacts with HDAC3 and HDAC4.

Interacts (via BTB domain) with CUL3,

PSMD7 AND RCOR1.

DISEASE 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.

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

**Background Descriptions** 

NAC1 is an N-terminal homodimerization domain that contains multiple copies of kelch repeats and/or C2H2-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. BTBD14B (BTB/POZ domain-containing protein 14B), also known as NACC1 (nucleus accumbens associated 1), BEND8 or NAC1, is a 527 amino acid protein that localizes to both the nucleus and the cytoplasm and



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contains one BTB (POZ) domain. Existing as a homooligomer that interacts with HDAC3 and HDAC4, BTBD14B functions as a transcriptional repressor that influences the transcriptional activity of CRIF1 and is required for proteasome recruitment to the nucleus and cytoplasm in dendritic spines. BTBD14B is overexpressed in multiple carcinomas, suggesting a role in tumor development and metastasis.

# **NAC1 Polyclonal Antibody - Additional Information**

Gene ID 112939

#### Other Names

Nucleus accumbens-associated protein 1, NAC-1, BTB/POZ domain-containing protein 14B, NACC1, BTBD14B, NAC1

### Target/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.

#### **Dilution**

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<span class ="dilution WB">WB~~1:1000</span><br \><span class</pre>
="dilution IHC-P">IHC-P~~N/A</span><br \><span class
="dilution IHC-F">IHC-F~~N/A</span><br \><span class
="dilution IF">IF~~1:50~200</span><br \><span class = "dilution ICC">ICC~~N/A</span><br
\><span class ="dilution E">E~~N/A</span>
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#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### **NAC1 Polyclonal Antibody - Protein Information**

Name NACC1

Synonyms BTBD14B, NAC1

#### **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.

#### **Cellular Location**

Nucleus. Cytoplasm. Note=Distribution in the cytoplasm is dependent on phosphorylation.

#### **Tissue Location**

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



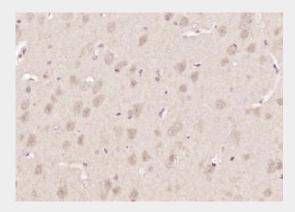
ovarian cancer.

# **NAC1 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **NAC1 Polyclonal Antibody - Images**



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NAC1) Polyclonal Antibody, Unconjugated (bs-12247R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.