

# **CAF-1** Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11112a

## **Specification**

# CAF-1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted

Host Clonality Isotype Calculated MW Antigen Region IHC-P, IF, WB,E <u>O9UIV1</u> O3KO85, O60809, O08BM8, O5ZJV9, O3ZC01, NP\_473367.2 Human Bovine, Chicken, Zebrafish, Mouse, Xenopus Rabbit Polyclonal Rabbit IgG 32745 34-61

# CAF-1 Antibody (N-term) - Additional Information

Gene ID 29883

**Other Names** 

CCR4-NOT transcription complex subunit 7, BTG1-binding factor 1, CCR4-associated factor 1, CAF-1, Caf1a, CNOT7, CAF1

#### Target/Specificity

This CAF-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 34-61 amino acids from the N-terminal region of human CAF-1.

Dilution IHC-P~~1:50~100 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

CAF-1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.



# **CAF-1** Antibody (N-term) - Protein Information

Name CNOT7

Synonyms CAF1

**Function** Has 3'-5' poly(A) exoribonuclease activity for synthetic poly(A) RNA substrate (PubMed:<u>19276069</u>, PubMed:<u>20634287</u>, PubMed:<u>31439799</u>). Its function seems to be partially redundant with that of CNOT8 (PubMed:<u>19605561</u>). Catalytic component of the CCR4-NOT complex which is one of the major cellular mRNA deadenylases and is linked to various cellular processes including bulk mRNA degradation, miRNA-mediated repression, translational repression during translational initiation and general transcription regulation (PubMed:<u>19276069</u>, PubMed:<u>20634287</u>, PubMed:<u>31439799</u>). During miRNA- mediated repression the complex also seems to act as translational repressor during translational initiation (PubMed:<u>20065043</u>). Additional complex functions may be a consequence of its influence on mRNA expression (PubMed:<u>19276069</u>, PubMed:<u>23236473</u>). Associates with members of the BTG family such as TOB1 and BTG2 and is required for their anti- proliferative activity (PubMed:<u>19276069</u>, PubMed:<u>23236473</u>).

### **Cellular Location**

Nucleus. Cytoplasm, P-body {ECO:0000250|UniProtKB:Q60809}. Cytoplasm, Cytoplasmic ribonucleoprotein granule. Note=NANOS2 promotes its localization to P-body (By similarity). Recruited to cytoplasmic ribonucleoprotein membraneless compartments by CAPRIN1, promoting deadenylation of mRNAs (PubMed:31439799) {ECO:0000250|UniProtKB:Q60809, ECO:0000269|PubMed:31439799}

# CAF-1 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CAF-1 Antibody (N-term) - Images





CAF-1 Fluorescent confocal image of Hela cell stained with Antibody (N-term)(Cat#AP11112a).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with CAF-1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). CAF-1 immunoreactivity is localized to Cytoplasm and Nucleus significantly.



Anti-CAF-1 Antibody (N-term) at 1:1000 dilution + HUVEC whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





CAF-1 Antibody (N-term) (Cat. #AP11112a)immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CAF-1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# CAF-1 Antibody (N-term) - Background

The protein encoded by this gene binds to an anti-proliferative protein, B-cell translocation protein 1, which negatively regulates cell proliferation. Binding of the two proteins, which is driven by phosphorylation of the anti-proliferative protein, causes signaling events in cell division that lead to changes in cell proliferation associated with cell-cell contact. The protein has both mouse and yeast orthologs. Alternate splicing of this gene results in two transcript variants encoding different isoforms.

# CAF-1 Antibody (N-term) - References

Lau, N.C., et al. Biochem. J. 422(3):443-453(2009) Aslam, A., et al. Mol. Biol. Cell 20(17):3840-3850(2009) Miyasaka, T., et al. Cancer Sci. 99(4):755-761(2008) Nishida, K., et al. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 63 (PT 12), 1061-1063 (2007) : Robin-Lespinasse, Y., et al. J. Cell. Sci. 120 (PT 4), 638-647 (2007) :