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CAF-1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11112A

Product Information

Application	IHC-P, IF, WB, E
Primary Accession	Q9UIV1
Other Accession	Q3KQ85, Q60809, Q08BM8, Q5ZJV9, Q3ZC01, NP_473367.2
Reactivity	Human
Predicted	Bovine, Chicken, Zebrafish, Mouse, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18739
Calculated MW	32745
Antigen Region	34-61

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~~1:100~500 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.

Protein Information

Name	CNOT7
Synonyms	CAF1

Function	Has 3'-5' poly(A) exoribonuclease activity for synthetic poly(A) RNA substrate (PubMed:19276069, PubMed:20634287, PubMed:31439799). Its function seems to be partially redundant with that of CNOT8 (PubMed:19605561). 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:19276069, PubMed:20634287, PubMed:31439799). During miRNA-mediated repression the complex also seems to act as translational repressor during translational initiation (PubMed:20065043). Additional complex functions may be a consequence of its influence on mRNA expression (PubMed:19276069, PubMed:23236473). Associates with members of the BTG family such as TOB1 and BTG2 and is required for their anti- proliferative activity (PubMed:19276069, PubMed:23236473).
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}

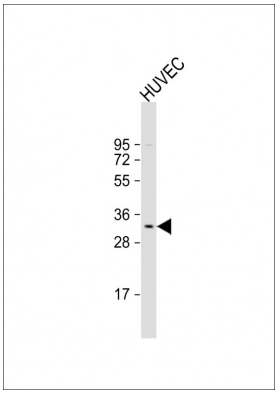
Background

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.

References

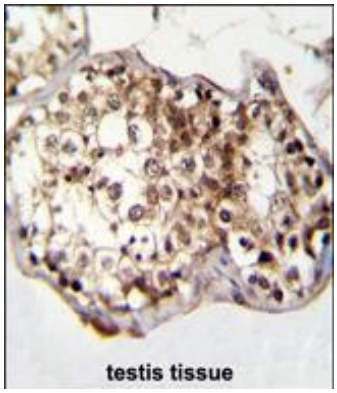
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Images

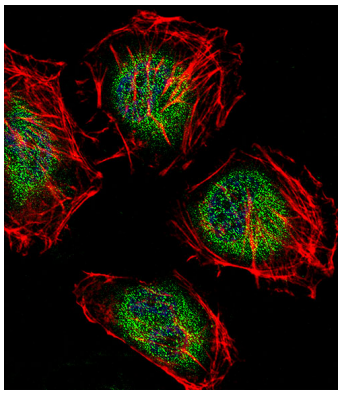


Anti-CAF-1 Antibody (N-term) at 1:1000 dilution + HUVEC whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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.



Fluorescent confocal image of Hela cell stained with CAF-1 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.