

### **CCNF Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18322c

## **Specification**

## **CCNF Antibody (Center) - Product Information**

**Application** WB,E **Primary Accession** P41002 NP 001752.2 Other Accession Human, Mouse Reactivity Host **Rabbit** Clonality **Polyclonal** Rabbit IgG Isotype Calculated MW 87640 Antigen Region 496-524

## **CCNF Antibody (Center) - Additional Information**

Gene ID 899

### **Other Names**

Cyclin-F, F-box only protein 1, CCNF, FBX1, FBX01

### Target/Specificity

This CCNF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 496-524 amino acids from the Central region of human CCNF.

# **Dilution**

WB~~1:1000

## **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**

CCNF Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **CCNF Antibody (Center) - Protein Information**

**Name CCNF** 

Synonyms FBX1, FBXO1



Function Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed: 20596027, PubMed: 22632967, PubMed: 27653696, PubMed: 26818844, PubMed: 27080313, PubMed: 28852778). The SCF(CCNF) E3 ubiquitin-protein ligase complex is an integral component of the ubiquitin proteasome system (UPS) and links proteasome degradation to the cell cycle (PubMed:8706131, PubMed:20596027, PubMed: 27653696, PubMed: 26818844). Mediates the substrate recognition and the proteasomal degradation of various target proteins involved in the regulation of cell cycle progression and in the maintenance of genome stability (PubMed: 20596027, PubMed: 22632967, PubMed: 27653696, PubMed: 26818844). Mediates the ubiquitination and proteasomal degradation of CP110 during G2 phase, thereby acting as an inhibitor of centrosome reduplication (PubMed: 20596027). In G2, mediates the ubiquitination and subsequent degradation of ribonucleotide reductase RRM2, thereby maintaining a balanced pool of dNTPs and genome integrity (PubMed: 22632967). In G2, mediates the ubiquitination and proteasomal degradation of CDC6, thereby suppressing DNA re-replication and preventing genome instability (PubMed: 26818844). Involved in the ubiquitination and degradation of the substrate adapter CDH1 of the anaphase-promoting complex (APC/C), thereby acting as an antagonist of APC/C in regulating G1 progression and S phase entry (PubMed: 27653696). May play a role in the G2 cell cycle checkpoint control after DNA damage, possibly by promoting the ubiquitination of MYBL2/BMYB (PubMed: 25557911).

#### **Cellular Location**

Nucleus. Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole Note=Localization to the centrosome is rare in S phase cells and increases in G2 cells. Localizes to both the mother and daughter centrioles. Localization to centrosomes is not dependent on CP110 Localizes to the nucleus in G2 phase.

### **Tissue Location**

Widely expressed, with expression detected in the heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

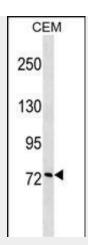
## **CCNF Antibody (Center) - Protocols**

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

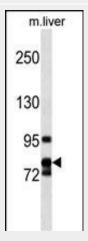
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **CCNF Antibody (Center) - Images**





CCNF Antibody (Center) (Cat. #AP18322c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the CCNF Antibody detected the CCNF protein (arrow).



CCNF Antibody (Center) (Cat. #AP18322c) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the CCNF Antibody detected the CCNF protein (arrow).

# **CCNF Antibody (Center) - Background**

This gene encodes a member of the cyclin family. Cyclins are important regulators of cell cycle transitions through their ability to bind and activate cyclin-dependent protein kinases. This member also belongs to the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of the ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbxs class and it was one of the first proteins in which the F-box motif was identified.

# **CCNF Antibody (Center) - References**

D'Angiolella, V., et al. Nature 466(7302):138-142(2010) Fung, T.K., et al. J. Biol. Chem. 277(38):35140-35149(2002) Kong, M., et al. EMBO J. 19(6):1378-1388(2000)







Bai, C., et al. Cell 86(2):263-274(1996) Bai, C., et al. EMBO J. 13(24):6087-6098(1994)