

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.

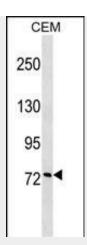
CCNF Antibody (Center) - Protocols

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

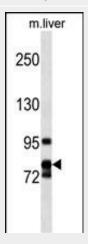
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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)