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CCNF Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP18322c

Specification

CCNF Antibody (Center) Blocking Peptide - Product Information

Primary Accession P41002

CCNF Antibody (Center) Blocking Peptide - Additional Information

Gene ID 899

Other Names
Cyclin-F, F-box only protein 1, CCNF, FBX1, FBXO1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CCNF Antibody (Center) Blocking Peptide - 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:26818844, PubMed:27080313, PubMed:27653696, 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:20596027, PubMed:26818844, PubMed:27653696, PubMed:8706131). 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:26818844, PubMed:27653696). 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) Blocking Peptide - Protocols

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

- Blocking Peptides

CCNF Antibody (Center) Blocking Peptide - Images

CCNF Antibody (Center) Blocking Peptide - Background

This gene encodes a member of the cyclin family. Cyclinsare important regulators of cell cycle transitions through theirability to bind and activate cyclin-dependent protein kinases. Thismember also belongs to the F-box protein family which ischaracterized by an approximately 40 amino acid motif, the F-box.The F-box proteins constitute one of the four subunits of theubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box),which function in phosphorylation-dependent ubiquitination. TheF-box proteins are divided into 3 classes: Fbws containing WD-40domains, Fbls containing leucine-rich repeats, and Fbxs containingeither different protein-protein interaction modules or norecognizable motifs. The protein encoded by this gene belongs tothe Fbxs class and it was one of the first proteins in which theF-box motif was identified.

CCNF Antibody (Center) Blocking Peptide - 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)