

Cyclin F Antibody

Rabbit Polyclonal Antibody Catalog # ABV11444

Specification

Cyclin F Antibody - Product Information

Application WB, IHC Primary Accession P41002

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 87640

Cyclin F Antibody - Additional Information

Gene ID 899

Positive Control WB: HEK293T, mouse liver, rat liver, whole

cell lysates, IHC: human breast cancer WB: 1:500 - 1:1000, IHC: 1:100 - 1:200.

Other Names

F-box only protein 1, CCNF, FBX1, FBX01, G2/mitotic-specific cyclin-F

Target/Specificity

Application & Usage

Cyclin F

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

1 mg/ml in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Cyclin F Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Cyclin F Antibody - Protein Information

Name CCNF

Synonyms FBX1, FBX01

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: 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:<a href="http://www.uniprot.org/citations/27653696" target="http://www.uniprot.org/citations/27653696" target="http://

target="_blank">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.

Cyclin F Antibody - Protocols





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

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

Cyclin F Antibody - Images

Cyclin F Antibody - Background

Cyclin F is a 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 CP110 during G2 phase, thereby acting as an inhibitor of centrosome reduplication. It is ubiquitously expressed in human cells but fluctuates dramatically through the cell cycle, peaking in G2 like cyclin A and decreasing prior to decline of cyclin B. Cyclin F exhibits regulated subcellular localization, being localized in the nucleus in most cells, with a significant percentage of cells showing only perinuclear staining.