

# Cyclin F Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51053

# **Product Information**

Application WB, IHC-P Primary Accession P41002

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW87640

# **Additional Information**

Gene ID 899

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

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the

C-term region of human Cyclin F. The exact sequence is proprietary.

**Dilution** WB~~1:1000 IHC-P~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

### **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: 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.

# **Background**

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.

# References

Bai C.,et al.EMBO J. 13:6087-6098(1994). Kraus B.,et al.Genomics 24:27-33(1994). Ota T.,et al.Nat. Genet. 36:40-45(2004). Martin J.,et al.Nature 432:988-994(2004). Bai C.,et al.Cell 86:263-274(1996).

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