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Anti-Cyclin F Antibody

Catalog # AP51053

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P41002
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87640

Additional Information

Gene ID	899
Other Names	FBX1; FBXO1; Cyclin-F; F-box only protein 1
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~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

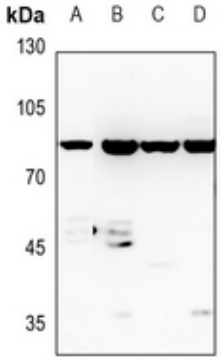
Name	CCNF
Synonyms	FBX1, FBXO1
Function	Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:20596027, PubMed:22632967, PubMed:26818844, PubMed:27080313, 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.

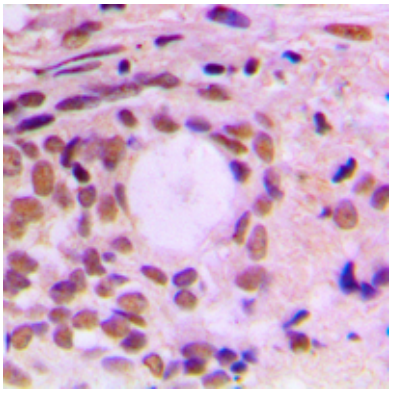
References

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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).

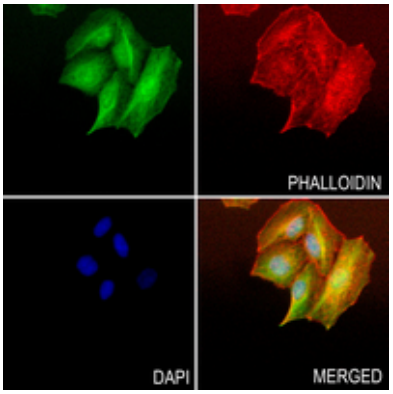
Images



Western blot analysis of Cyclin F expression in U2OS (A), mouse spleen (B), rat lung (C), rat spleen (D) whole cell lysates. (Predicted band size: 87 kD; Observed band size: 88 kD)



Immunohistochemical analysis of Cyclin F staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Cyclin F staining in H460 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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