

RNF7 Antibody
Rabbit mAb
Catalog # AP93095

Specification

RNF7 Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	Q9UBF6
Reactivity	Rat
Clonality	Monoclonal
Other Names	
CKBBP1; Rbx2; RNF7; ROC2; SAG;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	12683 Da

RNF7 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RNF7
Description	Probable component of the SCF (SKP1-CUL1-F-box protein) E3 ubiquitin ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins involved in cell cycle progression, signal transduction and transcription.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

RNF7 Antibody - Protein Information

Name RNF7 ([HGNC:10070](#))

Function

Catalytic component of multiple cullin-5-RING E3 ubiquitin- protein ligase complexes (ECS complexes), which mediate the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed: [21980433](http://www.uniprot.org/citations/21980433) target="_blank">21980433, PubMed: [33268465](http://www.uniprot.org/citations/33268465) target="_blank">33268465, PubMed: [38418882](http://www.uniprot.org/citations/38418882) target="_blank">38418882, PubMed: [38574733](http://www.uniprot.org/citations/38574733) target="_blank">38574733). It is thereby involved in various biological processes, such as cell cycle progression, signal transduction and transcription (PubMed: [21980433](http://www.uniprot.org/citations/21980433) target="_blank">21980433, PubMed: [33268465](#) target="_blank">33268465, PubMed: [38418882](#) target="_blank">38418882, PubMed: [38574733](#) target="_blank">38574733).

<http://www.uniprot.org/citations/33268465> target="_blank">33268465, PubMed:38418882, PubMed:38574733). The functional specificity of the E3 ubiquitin- protein ligase ECS complexes depend on the variable SOCS box-containing substrate recognition component (PubMed:21980433, PubMed:33268465). Within ECS complexes, RNF7/RBX2 recruits the E2 ubiquitination enzyme to the complex via its RING-type and brings it into close proximity to the substrate (PubMed:34518685). Catalytic subunit of various SOCS- containing ECS complexes, such as the ECS(SOCS7) complex, that regulate reelin signaling by mediating ubiquitination and degradation of DAB1 (By similarity). The ECS(SOCS2) complex mediates the ubiquitination and subsequent proteasomal degradation of phosphorylated EPOR and GHR (PubMed:21980433, PubMed:25505247). Promotes ubiquitination and degradation of NF1, thereby regulating Ras protein signal transduction (By similarity). As part of the ECS(ASB9) complex, catalyzes ubiquitination and degradation of CKB (PubMed:33268465). The ECS(SPSB3) complex catalyzes ubiquitination of nuclear CGAS (PubMed:38418882). As part of some ECS complex, catalyzes 'Lys-11'-linked ubiquitination and degradation of BTRC (PubMed:27910872). ECS complexes and ARIH2 collaborate in tandem to mediate ubiquitination of target proteins; ARIH2 mediating addition of the first ubiquitin on CRLs targets (PubMed:34518685, PubMed:38418882). Specifically catalyzes the neddylation of CUL5 via its interaction with UBE2F (PubMed:19250909). Does not catalyze neddylation of other cullins (CUL1, CUL2, CUL3, CUL4A or CUL4B) (PubMed:19250909). May play a role in protecting cells from apoptosis induced by redox agents (PubMed:10082581).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

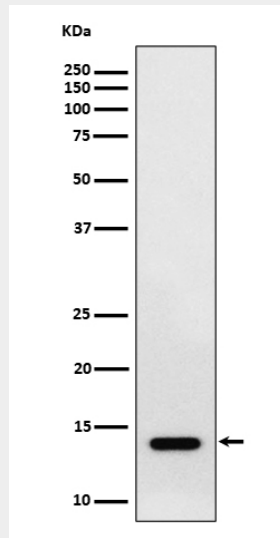
Expressed in heart, liver, skeletal muscle and pancreas. At very low levels expressed in brain, placenta and lung

RNF7 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RNF7 Antibody - Images



Western blot analysis of RNF7 expression in HepG2 cell lysate.