

Anti-RNF7 Rabbit Monoclonal Antibody

Catalog # ABO16555

Specification

Anti-RNF7 Rabbit Monoclonal Antibody - Product Information

Application WB, IHC, IF, ICC

Primary Accession

Host

Isotype

Q9UBF6

Rabbit

IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

Description

Anti-RNF7 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Anti-RNF7 Rabbit Monoclonal Antibody - Additional Information

Gene ID 9616

Other Names

RING-box protein 2, Rbx2, CKII beta-binding protein 1, CKBBP1, RING finger protein 7, Regulator of cullins 2, Sensitive to apoptosis gene protein, RNF7, RBX2, ROC2, SAG

Calculated MW

13 kDa KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200</br>

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human RNF7

Purification

Affinity-chromatography

Storage Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for

up to one month. Avoid repeated

freeze-thaw cycles.

Anti-RNF7 Rabbit Monoclonal Antibody - Protein Information

Name RNF7 (<u>HGNC:10070</u>)



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, PubMed:33268465, PubMed:38418882, PubMed:38574733). It is thereby involved in various biological processes, such as cell cycle progression, signal transduction and transcription (PubMed:21980433, PubMed: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: <a $href="http://www.uniprot.org/citations/19250909"\ target="_blank">19250909).\ Does\ not$ 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 LocationCytoplasm. Nucleus

Tissue Location

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

Anti-RNF7 Rabbit Monoclonal Antibody - Protocols

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

• Western Blot

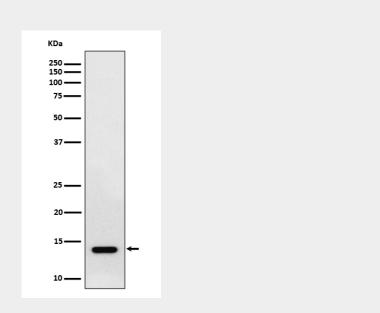




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- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-RNF7 Rabbit Monoclonal Antibody - Images



Western blot analysis of RNF7 expression in HepG2 cell lysate.