

FBXL5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9409a

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	Q9UKA1
Other Accession	Q8C2S5 , A2VE78
Reactivity	Human, Rat, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23907
Calculated MW	78555
Antigen Region	86-115

Additional Information

Gene ID	26234
Other Names	F-box/LRR-repeat protein 5, F-box and leucine-rich repeat protein 5, F-box protein FBL4/FBL5, p45SKP2-like protein, FBXL5, FBL4, FBL5, FLR1
Target/Specificity	This FBXL5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 86-115 amino acids from the N-terminal region of human FBXL5.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FBXL5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FBXL5
Synonyms	FBL4, FBL5, FLR1

Function

Component of some SCF (SKP1-cullin-F-box) protein ligase complex that plays a central role in iron homeostasis by promoting the ubiquitination and subsequent degradation of IREB2/IRP2 (PubMed:[19762596](#), PubMed:[19762597](#)). The C-terminal domain of FBXL5 contains a redox-sensitive [2Fe-2S] cluster that, upon oxidation, promotes binding to IRP2 to effect its oxygen-dependent degradation (PubMed:[32126207](#)). Under iron deficiency conditions, the N-terminal hemerythrin-like (Hr) region, which contains a diiron metal center, cannot bind iron and undergoes conformational changes that destabilize the FBXL5 protein and cause its ubiquitination and degradation (PubMed:[19762596](#), PubMed:[19762597](#)). When intracellular iron levels start rising, the Hr region is stabilized (PubMed:[19762596](#), PubMed:[19762597](#)). Additional increases in iron levels facilitate the assembly and incorporation of a redox active [2Fe-2S] cluster in the C- terminal domain (PubMed:[32126207](#)). Only when oxygen level is high enough to maintain the cluster in its oxidized state can FBXL5 recruit IRP2 as a substrate for polyubiquitination and degradation (PubMed:[32126207](#)). Promotes ubiquitination and subsequent degradation of the dynactin complex component DCTN1 (PubMed:[17532294](#)). Within the nucleus, promotes the ubiquitination of SNAI1; preventing its interaction with DNA and promoting its degradation (PubMed:[24157836](#)). Negatively regulates DNA damage response by mediating the ubiquitin- proteasome degradation of the DNA repair protein NABP2 (PubMed:[25249620](#)).

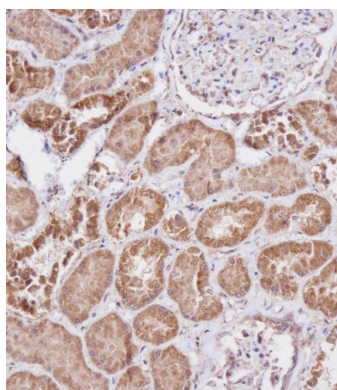
Cellular Location

Cytoplasm, perinuclear region. Nucleus

References

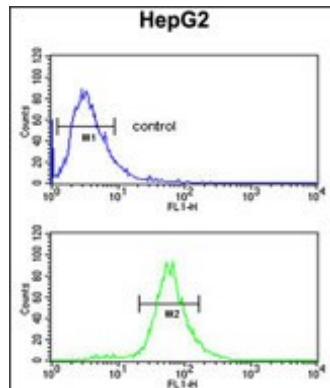
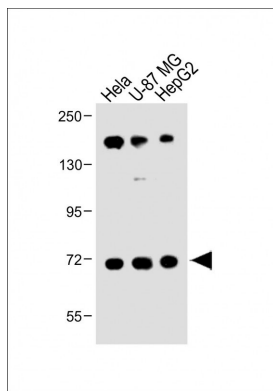
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Images



Immunohistochemical analysis of AP9409A on paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

All lanes : Anti-FBXL5 Antibody (N-term) at 1:1000 dilution
Lane 1: Hela whole cell lysate Lane 2: U-87 MG whole cell lysate Lane 3: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 79 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



FBXL5 Antibody (N-term) (Cat. #AP9409a) flow cytometric analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.