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FBXL5 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI12219

Product Information

Application	WB, IHC
Primary Accession	Q9UKA1
Other Accession	NM_012161, NP_036293
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	78555

Additional Information

Gene ID	26234
Alias Symbol	FBL4, FBL5, FLR1
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
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-FBXL5 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	FBXL5 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

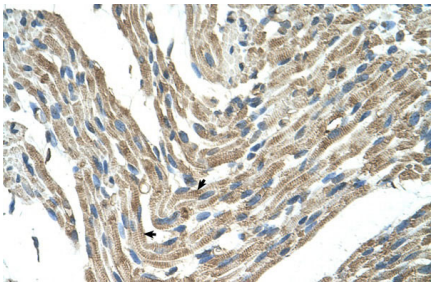
Protein Information

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

Images



Human Muscle



WB Suggested Anti-FBXL5 Antibody Titration: 5.0µg/ml
Positive Control: HepG2 cell lysate

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