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FBXL5 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI12220

Specification

FBXL5 antibody - middle region - Product Information

Application	**WB**
Primary Accession	Q9UKA1
Other Accession	NM_033535, NP_277077
Reactivity	**Human, Mouse, Rat, Rabbit, Horse, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**63kDa KDa**

FBXL5 antibody - middle region - 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 50 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.

FBXL5 antibody - middle region - 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 polyubiquination 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).

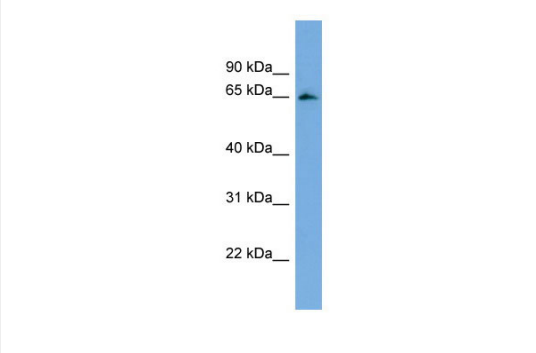
Cellular Location
Cytoplasm, perinuclear region. Nucleus

FBXL5 antibody - middle region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FBXL5 antibody - middle region - Images



WB Suggested Anti-FBXL5 Antibody Titration: 0.2-1 µg/ml

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Positive Control: THP-1 cell lysate