

FBXO5 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16765c**Specification**

FBXO5 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O9UKT4
Other Accession	NP_036309.1 , NP_001135994.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	50146
Antigen Region	192-221

FBXO5 Antibody (Center) - Additional Information**Gene ID** 26271**Other Names**

F-box only protein 5, Early mitotic inhibitor 1, FBXO5, EMI1, FBX5

Target/Specificity

This FBXO5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 192-221 amino acids from the Central region of human FBXO5.

Dilution

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

FBXO5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

FBXO5 Antibody (Center) - Protein Information**Name** FBXO5 ([HGNC:13584](#))**Function** Regulator of APC activity during mitotic and meiotic cell cycle (PubMed:[16921029](#),

PubMed:[17234884](#), PubMed:[17485488](#), PubMed:[17875940](#), PubMed:[23708001](#), PubMed:[23708605](#)). During mitotic cell cycle plays a role as both substrate and inhibitor of APC-FZR1 complex (PubMed:[16921029](#), PubMed:[17234884](#), PubMed:[17485488](#), PubMed:[17875940](#), PubMed:[23708001](#), PubMed:[23708605](#), PubMed:[29875408](#)). During G1 phase, plays a role as substrate of APC-FZR1 complex E3 ligase (PubMed:[29875408](#)). Then switches as an inhibitor of APC-FZR1 complex during S and G2 leading to cell-cycle commitment (PubMed:[29875408](#)). As APC inhibitor, prevents the degradation of APC substrates at multiple levels: by interacting with APC and blocking access of APC substrates to the D-box coreceptor, formed by FZR1 and ANAPC10; by suppressing ubiquitin ligation and chain elongation by APC by preventing the UBE2C and UBE2S activities (PubMed:[16921029](#), PubMed:[23708001](#), PubMed:[23708605](#)). Plays a role in genome integrity preservation by coordinating DNA replication with mitosis through APC inhibition in interphase to stabilize CCNA2 and GMNN in order to promote mitosis and prevent rereplication and DNA damage-induced cellular senescence (PubMed:[17234884](#), PubMed:[17485488](#), PubMed:[17875940](#)). During oocyte maturation, plays a role in meiosis through inactivation of APC-FZR1 complex. Inhibits APC through RPS6KA2 interaction that increases FBXO5 affinity for CDC20 leading to the metaphase arrest of the second meiotic division before fertilization (By similarity). Controls entry into the first meiotic division through inactivation of APC-FZR1 complex (By similarity). Promotes migration and osteogenic differentiation of mesenchymal stem cells (PubMed:[29850565](#)).

Cellular Location

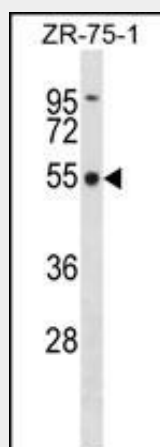
Nucleus. Cytoplasm. Cytoplasm, cytoskeleton, spindle. Note=In interphase, localizes in a punctate manner in the nucleus and cytoplasm with some perinuclear concentration (PubMed:[11988738](#)). In mitotic cells, localizes throughout the cell, particularly at the spindle (PubMed:[15469984](#))

FBXO5 Antibody (Center) - 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](#)

FBXO5 Antibody (Center) - Images



FBXO5 Antibody (Center) (Cat. #AP16765c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the FBXO5 antibody detected the FBXO5 protein (arrow).

FBXO5 Antibody (Center) - Background

This gene encodes a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of the ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbxs class. This protein is similar to xenopus early mitotic inhibitor-1 (Emi1), which is a mitotic regulator that interacts with Cdc20 and inhibits the anaphase promoting complex. Alternatively spliced transcript variants encoding different isoforms have been identified.

FBXO5 Antibody (Center) - References

Lei, S.F., et al. J. Bone Miner. Res. (2010) In press :
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Lee, J., et al. Mol. Biol. Cell 20(7):1891-1902(2009)
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Iwai, H., et al. Cell 130(4):611-623(2007)