

# Emi1 Rabbit mAb

Catalog # AP77108

## **Product Information**

**Application** WB, IHC-P, IF, ICC, IP

Primary Accession Q9UKT4

**Reactivity** Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human Emi1

**Purification** Affinity Chromatography

Calculated MW 50146

## **Additional Information**

**Gene ID** 26271

Other Names FBXO5

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

### **Protein Information**

Name FBXO5 ( HGNC:13584)

**Function** Regulator of APC activity during mitotic and meiotic cell cycle

(PubMed: 16921029, PubMed: 17234884, PubMed: 17485488,

PubMed: <u>17875940</u>, PubMed: <u>23708001</u>, PubMed: <u>23708605</u>). During mitotic cell cycle plays a role as both substrate and inhibitor of APC-FZR1 complex

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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

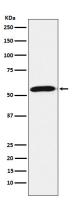
UBE2C and UBE2S activities (PubMed: 16921029, PubMed: 23708001,

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 affiniy 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)

## **Images**



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