

### **FZR Antibody**

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8522b

### **Specification**

## **FZR Antibody - Product Information**

Application WB,E
Primary Accession Q9UM11
Reactivity Human
Host Mouse
Clonality monoclonal
Isotype IgG1,k
Calculated MW 55179

# **FZR Antibody - Additional Information**

### **Gene ID** 51343

#### **Other Names**

Fizzy-related protein homolog, Fzr, CDC20-like protein 1, Cdh1/Hct1 homolog, hCDH1, FZR1, CDH1, FYR, FZR, KIAA1242

## Target/Specificity

This FZR antibody is generated from a mouse immunized with a recombinant protein between 1-496 amino acids from human FZR.

#### **Dilution**

WB~~1:2000

#### **Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

# 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**

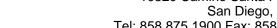
FZR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **FZR Antibody - Protein Information**

### Name FZR1 (HGNC:24824)

**Function** Substrate-specific adapter for the anaphase promoting complex/cyclosome (APC/C) E3 ubiquitin-protein ligase complex. Associates with the APC/C in late mitosis, in replacement of CDC20, and activates the APC/C during anaphase and telophase. The APC/C remains active in degrading substrates to ensure that positive regulators of the cell cycle do not accumulate







prematurely. At the G1/S transition FZR1 is phosphorylated, leading to its dissociation from the APC/C. Following DNA damage, it is required for the G2 DNA damage checkpoint: its dephosphorylation and reassociation with the APC/C leads to the ubiquitination of PLK1, preventing entry into mitosis. Acts as an adapter for APC/C to target the DNA-end resection factor RBBP8/CtIP for ubiquitination and subsequent proteasomal degradation. Through the regulation of RBBP8/CtIP protein turnover, may play a role in DNA damage response, favoring DNA double-strand repair through error-prone non-homologous end joining (NHEJ) over error-free, RBBP8-mediated homologous recombination (HR) (PubMed: 25349192).

# **Cellular Location** [Isoform 2]: Nucleus

#### **Tissue Location**

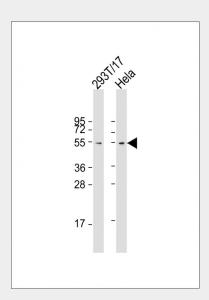
Isoform 2 is expressed at high levels in heart, liver, spleen and some cancer cell lines whereas isoform 3 is expressed only at low levels in these tissues.

### **FZR Antibody - 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

## FZR Antibody - Images



All lanes: Anti-FZR Antibody at 1:2000 dilution Lane 1: 293T/17 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### FZR Antibody - Background





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Key regulator of ligase activity of the anaphase promoting complex/cyclosome (APC/C), which confers substrate specificity upon the complex. Associates with the APC/C in late mitosis, in replacement of CDC20, and activates the APC/C during anaphase and telophase. The APC/C remains active in degrading substrates to ensure that positive regulators of the cell cycle do not accumulate prematurely. At the G1/S transition FZR1 is phosphorylated, leading to its dissociation from the APC/C. Following DNA damage, it is required for the G2 DNA damage checkpoint: its dephosphorylation and reassociation with the APC/C leads to the ubiquitination of PLK1, preventing entry into mitosis.

# **FZR Antibody - References**

Kramer E.R., et al. Curr. Biol. 8:1207-1210(1998). Kotani S., et al. Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases. Sudo T., et al. Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases. Zhou Y., et al. Biochem. J. 374:349-358(2003). Nagase T., et al. DNA Res. 6:337-345(1999).