

FZR Antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al16152

# Specification

# FZR Antibody - N-terminal region - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>Q9UM11</u> <u>XP\_005259630</u> Human Rabbit Polyclonal 54kDa KDa

## FZR Antibody - N-terminal region - Additional Information

Gene ID 51343

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

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

### **Reconstitution & Storage**

Add 50 &mu, I of distilled water. Final Anti-FZR 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

FZR Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## FZR Antibody - N-terminal region - Protein Information

## Name FZR1 (<u>HGNC:24824</u>)

#### 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:<a href="http://www.uniprot.org/citations/25349192" target="\_blank">>25349192</a>).

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 - N-terminal region - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### FZR Antibody - N-terminal region - Images

	90 kDa 65 kDa 40 kDa 29 kDa 22 kDa	Host: Rabbit Target Name: FZR Sample Tissue: Ovary Tumor Lysate Antibody Dilution: 1.0µg/ml	
Host: Rabbit Target Name: FZR			

Target Name: FZR Sample Tissue: Ovary Tumor lysates Antibody Dilution: 1.0µg/ml

## FZR Antibody - N-terminal region - Background

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 - N-terminal region - 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).