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FZR Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8522b

Product Information

Application	WB, E
Primary Accession	Q9UM11
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1621CT637.76.67
Calculated MW	55179

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 between1-496 amino acids from human FZR.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
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.

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.

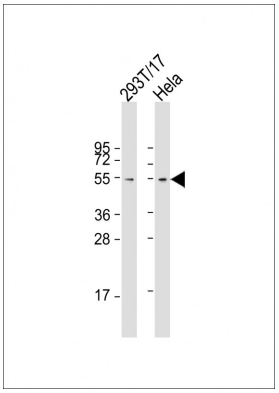
Background

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.

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).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.