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FZR1 Antibody (clone 4C4)

Mouse Monoclonal Antibody

Catalog # ALS14358

Specification

FZR1 Antibody (clone 4C4) - Product Information

Application	**WB, IHC**
Primary Accession	Q9UM11
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**55kDa KDa**

FZR1 Antibody (clone 4C4) - 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
Human CDH1

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
FZR1 Antibody (clone 4C4) is for research use only and not for use in diagnostic or therapeutic procedures.

FZR1 Antibody (clone 4C4) - 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:<a href="http://www.uniprot.org/citations/25349192"

target="_blank">25349192).

Cellular Location
[Isoform 2]: Nucleus

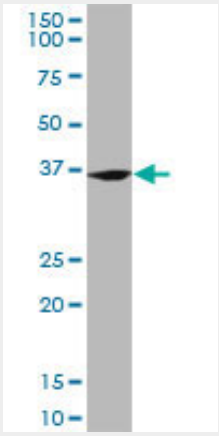
Tissue Location
Isoform 2 is expressed at high levels in heart, liver, spleen and some cancer cell lines whereas isoform 3 is expressed only at low levels in these tissues.

FZR1 Antibody (clone 4C4) - Protocols

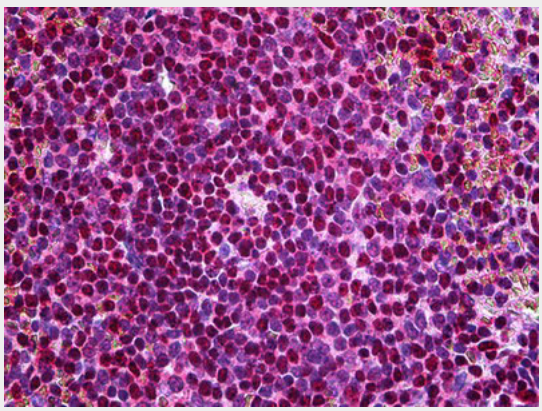
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FZR1 Antibody (clone 4C4) - Images



FZR1 monoclonal antibody, clone 4C4. Western blot of FZR1 expression in HeLa NE.



Anti-FZR1 antibody IHC of human spleen.

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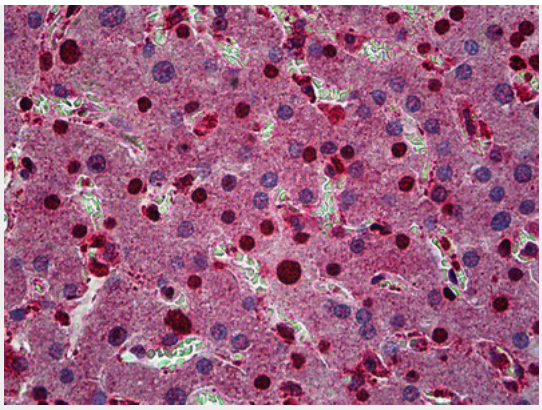

Anti-FZR1 antibody IHC of human liver.

FZR1 Antibody (clone 4C4) - 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.

FZR1 Antibody (clone 4C4) - 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).