

FZR1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP19009a**Specification**

FZR1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O9UM11](#)**FZR1 Antibody (N-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FZR1 Antibody (N-term) Blocking Peptide - Protein InformationName 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.

FZR1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

FZR1 Antibody (N-term) Blocking Peptide - Images**FZR1 Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - References

Olson, J.E., et al. Breast Cancer Res. Treat. 125(1):221-228(2011)Colombo, S.L., et al. Proc. Natl. Acad. Sci. U.S.A. 107(44):18868-18873(2010)Naoe, H., et al. Mol. Cell. Biol. 30(16):3994-4005(2010)Sigl, R., et al. J. Cell. Sci. 122 (PT 22), 4208-4217 (2009) :Bassermann, F., et al. Cell 134(2):256-267(2008)