

Rad17 (H-3): sc-17761

BACKGROUND

DNA damage results in the arrest of cell cycle progression, allowing the damaged DNA to be repaired prior to replication. Checkpoints exist at several cell cycle phase transitions to maintain this genetic integrity. Rad9, Rad17, Rad24 and Mec3 are involved in activating the G₁ and G₂ checkpoints. Pol2 (also known as Dun2), encoding the catalytic subunit of DNA polymerase ϵ , plays a role in activating the S phase checkpoint. The protein kinase Rad53 (also designated Spk1, Mec2 or Sad1) is essential for both G₂ and S phase arrest. Activation of Rad53 is regulated by Mec1 (also known as Esr1 and Sad3), a homolog of the human ATM protein. Pds1 and Mad2 both regulate checkpoints associated with incomplete spindle replication. Dun1, another protein kinase, plays a role in transducing the DNA damage signal.

CHROMOSOMAL LOCATION

Genetic locus: RAD17 (human) mapping to 5q13.2.

SOURCE

Rad17 (H-3) is a mouse monoclonal antibody raised against amino acids 371-670 of Rad17 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Rad17 (H-3) is available conjugated to agarose (sc-17761 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-17761 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-17761 PE), fluorescein (sc-17761 FITC), Alexa Fluor[®] 488 (sc-17761 AF488), Alexa Fluor[®] 546 (sc-17761 AF546), Alexa Fluor[®] 594 (sc-17761 AF594) or Alexa Fluor[®] 647 (sc-17761 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-17761 AF680) or Alexa Fluor[®] 790 (sc-17761 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Rad17 (H-3) is recommended for detection of Rad17 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:200-1:2,000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rad17 siRNA (h): sc-36358, Rad17 shRNA Plasmid (h): sc-36358-SH and Rad17 shRNA (h) Lentiviral Particles: sc-36358-V.

Molecular Weight of Rad17: 75 kDa.

Positive Controls: U266 whole cell lysate: sc-364800, Raji whole cell lysate: sc-364236 or K-562 whole cell lysate: sc-2203.

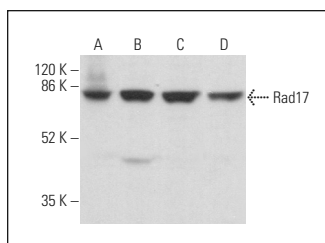
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

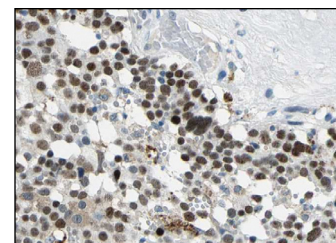
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Rad17 (H-3): sc-17761. Western blot analysis of Rad17 expression in Jurkat nuclear extract (A) and U266 (B), Raji (C) and K-562 (D) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



Rad17 (H-3): sc-17761. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis cancer showing nuclear staining of tumor cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

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- Zheng, T., et al. 2020. RBMX is required for activation of ATR on repetitive DNAs to maintain genome stability. *Cell Death Differ.* 27: 3162-3176.
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PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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