

Rad18 (4H237): sc-71952

BACKGROUND

The RING-type zinc finger protein Rad18 is essential in post-replication repair of damaged DNA and contributes to the maintenance of genomic stability. Rad18 maintains chromosomal DNA with the Rad54-dependent DNA repair pathway and recruits ubiquitin-conjugating enzymes in the Rad6 pathway. Rad18 functions in gap-filling of a daughter strand on replication of damaged DNA and is localized in the nucleus.

REFERENCES

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3. Hoege, C., Pfander, B., Moldovan, G.L., Pyrowolakis, G. and Jentsch, S. 2002. Rad6-dependent DNA repair is linked to modification of PCNA by ubiquitin and SUMO. *Nature* 419: 135-141.
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7. Nikiforov, A., Svetlova, M., Solovjeva, L., Sasina, L., Siino, J., Nazarov, I., Bradbury, M. and Tomilin, N. 2004. DNA damage-induced accumulation of Rad18 protein at stalled replication forks in mammalian cells involves upstream protein phosphorylation. *Biochem. Biophys. Res. Commun.* 323: 831-837.
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CHROMOSOMAL LOCATION

Genetic locus: RAD18 (human) mapping to 3p25.3.

SOURCE

Rad18 (4H237) is a mouse monoclonal antibody raised against amino acids 402-414 of Rad1 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

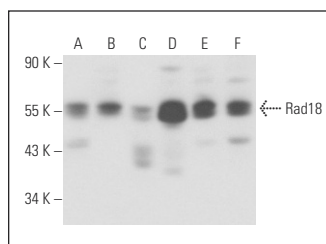
Rad18 (4H237) is recommended for detection of Rad18 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Rad18 siRNA (h): sc-72142, Rad18 shRNA Plasmid (h): sc-72142-SH and Rad18 shRNA (h) Lentiviral Particles: sc-72142-V.

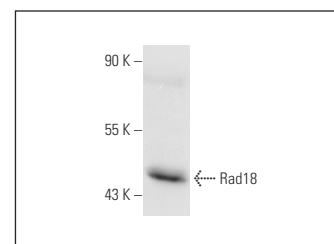
Molecular Weight of Rad18: 56 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, K-562 nuclear extract: sc-2130 or HeLa whole cell lysate: sc-2200.

DATA



Rad18 (4H237): sc-71952. Western blot analysis of Rad18 expression in HeLa (A), UV-treated HeLa (B), HL-60 (C), MCF7 (D), K-562 (E) and HEL 92.1.7 (F) nuclear extracts.



Rad18 (4H237): sc-71952. Western blot analysis of Rad18 expression in HeLa whole cell lysate.

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.

PROTOCOLS

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