



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Rad17 (m): 293T Lysate: sc-122937

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.

REFERENCES

- Li, R., Havel, C., Watson, J.A. and Murray, A.W. 1993. The mitotic feedback control gene Mad2 encodes the α -subunit of a prenyltransferase. *Nature* 366: 82-84.
- Zhou, Z. and Elledge, S.J. 1993. Dun1 encodes a protein kinase that controls the DNA damage response in yeast. *Cell* 75: 1119-1127.
- Abloussekhra, A., Vialard, J.E., Morrison, D.E., de la Torre-Ruiz, M.A., Cernakova, L., Fabre, F. and Lowndes, N.F. 1996. A novel role for the budding yeast Rad9 checkpoint gene in DNA damage-dependent transcription. *EMBO J.* 15: 3912-3922.
- Siede, W., Nusspaumer, G., Portillo, V., Rodriguez, R. and Friedberg, E.C. 1996. Cloning and characterization of Rad17, a gene controlling cell cycle responses to DNA damage in *Saccharomyces cerevisiae*. *Nucl. Acids Res.* 24: 1669-1675.
- Lydall, D., Nikolsky, Y., Bishop, D.K. and Weinert, T. 1996. A meiotic recombination checkpoint controlled by mitotic checkpoint genes. *Nature* 383: 840-843.
- Longhese, M.P., Frascini, R., Plevani, P. and Lucchini, G. 1996. Yeast Pep3/Mec3 mutants fail to delay entry into S phase and to slow DNA replication in response to DNA damage, and they define a functional link between Mec3 and DNA primase. *Mol. Cell. Biol.* 16: 3235-3244.
- Navas, T.A., Sanchez, Y. and Elledge, S.J. 1996. Rad9 and DNA polymerase ϵ form parallel sensory branches for transducing the DNA damage checkpoint signal in *Saccharomyces cerevisiae*. *Genes Dev.* 10: 2632-2643.
- Sanchez, Y., Desany, B.A., Jones, W.J., Liu, Q., Wang, B. and Elledge, S.J. 1996. Regulation of Rad53 by the ATM-like kinases Mec1 and Tel1 in yeast cell cycle checkpoint pathways. *Science* 271: 357-360.
- Yamamoto, A., Guacci, V. and Koshland, D. 1996. Pds1p, an inhibitor of anaphase in budding yeast, plays a critical role in the APC and checkpoint pathway(s). *J. Cell Biol.* 133: 99-110.

CHROMOSOMAL LOCATION

Genetic locus: Rad17 (mouse) mapping to 13 D1.

RESEARCH USE

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

PRODUCT

Rad17 (m): 293T Lysate represents a lysate of mouse Rad17 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Rad17 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Rad17 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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