



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)



Ercc6l siRNA (m): sc-144921

BACKGROUND

PICH (Plk1-interacting checkpoint helicase), also known as DNA excision repair protein ERCC-6-like (ERCC6L) or tumor antigen BJ-HCC-15, is a 1,250 amino acid protein belonging to the SNF2/RAD54 helicase family. PICH is a DNA helicase and an essential component of the spindle assembly checkpoint. During mitosis, PICH recruits MAD2 to kinetochores and also regulates the tension on centromeric chromatin. PICH is concentrated in between the kinetochores in prometaphase cells, while in metaphase it localizes to the thin threads composed of catenated centromeric DNA that stretch between sister kinetochores. PICH is phosphorylated by Plk1, which prevents PICH from associating with chromosome arms and restricts the localization of PICH to the kinetochore-centromere region. PICH/Plk1 interaction is also required for correct Plk1 localization to the kinetochore. PICH contains one helicase ATP-binding domain, two TPR repeats and one helicase C-terminal domain.

REFERENCES

1. Golsteyn, R.M., Schultz, S.J., Bartek, J., Ziemiecki, A., Ried, T. and Nigg, E.A. 1994. Cell cycle analysis and chromosomal localization of human Plk1, a putative homologue of the mitotic kinases *Drosophila* polo and *Saccharomyces cerevisiae* CDC5. *J. Cell Sci.* 107: 1509-1517.
2. Beausoleil, S.A., Jedrychowski, M., Schwartz, D., Elias, J.E., Villen, J., Li, J., Cohn, M.A., Cantley, L.C. and Gygi, S.P. 2004. Large-scale characterization of HeLa cell nuclear phosphoproteins. *Proc. Natl. Acad. Sci. USA* 101: 12130-12135.
3. Xu, Y., Chen, X. and Li, Y. 2005. Ercc6l, a gene of SNF2 family, may play a role in the teratogenic action of alcohol. *Toxicol. Lett.* 157: 233-239.
4. Baumann, C., Körner, R., Hofmann, K. and Nigg, E.A. 2007. PICH, a centromere-associated SNF2 family ATPase, is regulated by Plk1 and required for the spindle checkpoint. *Cell* 128: 101-114.
5. Spence, J.M., Phua, H.H., Mills, W., Carpenter, A.J., Porter, A.C. and Farr, C.J. 2007. Depletion of topoisomerase IIalpha leads to shortening of the metaphase interkinetochore distance and abnormal persistence of PICH-coated anaphase threads. *J. Cell Sci.* 120: 3952-3964.
6. Leng, M., Bessuso, D., Jung, S.Y., Wang, Y. and Qin, J. 2008. Targeting Plk1 to chromosome arms and regulating chromosome compaction by the PICH ATPase. *Cell Cycle* 7: 1480-1489.
7. Svendsen, J.M., Smogorzewska, A., Sowa, M.E., O'Connell, B.C., Gygi, S.P., Elledge, S.J. and Harper, J.W. 2009. Mammalian BTBD12/SLX4 assembles a Holliday junction resolvase and is required for DNA repair. *Cell* 138: 63-77.

CHROMOSOMAL LOCATION

Genetic locus: Ercc6l (mouse) mapping to X D.

PROTOCOLS

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

PRODUCT

Ercc6l siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Ercc6l shRNA Plasmid (m): sc-144921-SH and Ercc6l shRNA (m) Lentiviral Particles: sc-144921-V as alternate gene silencing products.

For independent verification of Ercc6l (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-144921A, sc-144921B and sc-144921C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Ercc6l siRNA (m) is recommended for the inhibition of Ercc6l expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Ercc6l gene expression knockdown using RT-PCR Primer: Ercc6l (m)-PR: sc-144921-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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