



# 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

# PELO (h2): 293T Lysate: sc-170856

## BACKGROUND

PELO (pelota homolog), also known as CGI-17 or PR01770, is a 385 amino acid nuclear and cytoplasmic protein that belongs to the eukaryotic release factor 1 family and the pelota subfamily. Evolutionary conserved, PELO may be involved in the regulation of cell proliferation and stem cell self-renewal, and is suggested to be required for normal chromosome segregation during cell division and genomic stability. PELO may possess ribonuclease activity and has the ability to recognize stalled ribosomes, thereby triggering endonucleolytic cleavage of mRNA, a mechanism that releases non-functional ribosomes and degrades damaged mRNAs. PELO is ubiquitously expressed and utilizes divalent metal cations as cofactors. PELO may be essential for spermatogenesis, cell cycle control and in meiotic cell division. PELO is encoded by a gene located on human chromosome 5q11.2.

## REFERENCES

1. Eberhart, C.G. and Wasserman, S.A. 1995. The pelota locus encodes a protein required for meiotic cell division: an analysis of G<sub>2</sub>/M arrest in *Drosophila* spermatogenesis. *Development* 121: 3477-3486.
2. Ragan, M.A., Logsdon, J.M., Sensen, C.W., Charlebois R.L. and Doolittle, W.F. 1996. An archaeobacterial homolog of pelota, a meiotic cell division protein in eukaryotes. *FEMS Microbiol. Lett.* 144: 151-155.
3. Shamsadin, R., Adham, I.M., von Beust G. and Engel, W. 2000. Molecular cloning, expression and chromosome location of the human pelota gene PELO. *Cytogenet. Cell Genet.* 90: 75-78.
4. Shamsadin, R., Adham I.M. and Engel, W. 2002. Mouse pelota gene (PELO): cDNA cloning, genomic structure, and chromosomal localization. *Cytogenet. Genome Res.* 97: 95-99.
5. Adham, I.M., Sallam, M.A., Steding, G., Korabiowska, M., Brinck, U., Hoyer-Fender, S., Oh C. and Engel, W. 2003. Disruption of the pelota gene causes early embryonic lethality and defects in cell cycle progression. *Mol. Cell. Biol.* 23: 1470-1476.
6. Xi, R., Doan, C., Liu D. and Xie, T. 2005. Pelota controls self-renewal of germline stem cells by repressing a Bam-independent differentiation pathway. *Development* 132: 5365-5374.
7. Burnicka-Turek, O., Kata, A., Buyandelger, B., Ebermann, L., Kramann, N., Burfeind, P., Hoyer-Fender, S., Engel W. and Adham, I.M. 2010. Pelota interacts with HAX1, EIF3G and SRPX and the resulting protein complexes are associated with the Actin cytoskeleton. *BMC Cell Biol.* 11: 28.

## CHROMOSOMAL LOCATION

Genetic locus: PELO (human) mapping to 5q11.2.

## PRODUCT

PELO (h2): 293T Lysate represents a lysate of human PELO transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## 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.

## APPLICATIONS

PELO (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive PELO antibodies. Recommended use: 10-20 µl per lane.

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.