



ERp19 (m): 293 Lysate: sc-110718

BACKGROUND

Endoplasmic reticulum proteins (ERps) are widely expressed proteins and localize to the ER. ERp19, ERp29, ERp46, ERp57 and ERp72 may act as proteases, protein disulfide isomerases, thiol-disulfide oxidases, phospholipases or a combination of these. ERp19, also designated thioredoxin domain-containing protein 12 (TXNDC12), and ERp46, also designated thioredoxin domain containing 5 (TXNDC5), belong to the thioredoxin superfamily and contain a thioredoxin fold with a consensus active-site sequence (CxxC). Both ERp19 and ERp46 are widely expressed ER luminal proteins that are most abundant in the liver and are enriched in purified liver ER vesicles. ERp19 shows significant protein thiol-disulfide oxidase activity *in vitro*, which is dependent on the presence of both active-site cysteines.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609448. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Alanen, H.I., Williamson, R.A., Howard, M.J., Lappi, A.K., Jääntti, H.P., Rautio, S.M., Kellokumpu, S. and Ruddock, L.W. 2003. Functional characterization of ERp18, a new endoplasmic reticulum-located thioredoxin superfamily member. *J. Biol. Chem.* 278: 28912-28920.
3. Liu, F., Rong, Y.P., Zeng, L.C., Zhang, X. and Han, Z.G. 2003. Isolation and characterization encoding a secretory protein. *Gene* 315: 71-78.
4. Knoblich, B., Keller, B.O., Groenendyk, J., Aldred, S., Zheng, J., Lemire, B.D., Li, L. and Michalak, M. 2003. ERp19 and ERp46, new members of the thioredoxin family of endoplasmic reticulum proteins. *Mol. Cell. Proteomics* 2: 1104-1119.

CHROMOSOMAL LOCATION

Genetic locus: TXNDC12 (mouse) mapping to 1p32.3.

PRODUCT

ERp19 (m): 293 Lysate represents a lysate of mouse ERp19 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ERp19 (m): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive ERp19 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 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.

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.