## SANTA CRUZ BIOTECHNOLOGY, INC.

# ERp29 (m): 293T Lysate: sc-120110



#### BACKGROUND

Endoplasmic reticulum proteins (ERps) are widely expressed proteins that 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. ERp29, also designated chromosome 12 open reading frame 8 (C12ORF8), is a reticuloplasmin that dimerizes and may function in secretory protein processing within the ER. ERp29 also plays a possible role in the folding of proteins in the ER. Though this protein shows sequence similarity to the protein disulfide isomerase family, it does not function as a disulfide isomerase, as it lacks the thioredoxin motif characteristic of this family. Like other reticuloplasmins, ERp29 contains an N-terminal hydrophobic signal sequence and a C-terminal endoplasmic reticulum retention motif (KEEL).

## REFERENCES

- Bo, Z., Yongping, S., Fengchao, W., Guoping, A. and Yongjiang, W. 2005. Identification of differentially expressed proteins of γ-ray irradiated rat intestinal epithelial IEC-6 cells by two-dimensional gel electrophoresis and matrix-assisted laser desorption/ionisation-time of flight mass spectrometry. Proteomics 5: 426-432.
- Chandra, H., Gupta, P.K., Sharma, K., Mattoo, A.R., Garg, S.K., Gade, W.N., Sirdeshmukh, R., Maithal, K. and Singh, Y. 2005. Proteome analysis of mouse macrophages treated with anthrax lethal toxin. Biochim. Biophys. Acta 1747: 151-159.
- Morand, J.P., Macri, J. and Adeli, K. 2005. Proteomic profiling of hepatic endoplasmic reticulum-associated proteins in an animal model of Insulin resistance and metabolic dyslipidemia. J. Biol. Chem. 280: 17626-17633.
- Park, S., You, K.H., Shong, M., Goo, T.W., Yun, E.Y., Kang, S.W. and Kwon, O.Y. 2005. Overexpression of ERp29 in the thyrocytes of FRTL-5 cells. Mol. Biol. Rep. 32: 7-13.
- Willis, D., Li, K.W., Zheng, J.Q., Chang, J.H., Smit, A.B., Kelly, T., Merianda, T.T., Sylvester, J., van Minnen, J. and Twiss, J.L. 2005. Differential transport and local translation of cytoskeletal, injury-response, and neurodegeneration protein mRNAs in axons. J. Neurosci. 25: 778-791.

#### CHROMOSOMAL LOCATION

Genetic locus: Erp29 (mouse) mapping to 5 F.

#### PRODUCT

ERp29 (m): 293T Lysate represents a lysate of mouse ERp29 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l 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.

#### PROTOCOLS

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

## APPLICATIONS

ERp29 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ERp29 antibodies. Recommended use: 10-20  $\mu l$  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.