SANTA CRUZ BIOTECHNOLOGY, INC.

CUEDC1 (m): 293T Lysate: sc-125185

BACKGROUND

The coupling of ubiquitin conjugation to endoplasmic reticulum (ER) degradation (CUE) domain functions as a ubiquitin (UB) binding domain that is approximately 40 amino acids in length. Present in eukaryotic proteins that are involved in ubiquitination and protein trafficking pathways, CUE domains can bind monoubiquitin and may be required for ubiquitination of the proteins in which they are found. CUEDC1 (CUE domain-containing protein 1) is a 386 amino acid protein that contains one CUE domain, suggesting a possible role in protein trafficking and degradation pathways. Defects in the gene encoding CUEDC1 may be associated with early stage cervical cancer, implicating CUEDC1 as a potential tumor marker. Two isoforms of CUEDC1 exist due to alternative splicing events.

REFERENCES

1. Ponting, C.P. 2000. Proteins of the endoplasmic-reticulum-associated degradation pathway: domain detection and function prediction. Biochem. J. 351: 527-535.
2. Prag, G., Misra, S., Jones, E.A., Ghirlando, R., Davies, B.A., Horazdovsky, B.F. and Hurley, J.H. 2003. Mechanism of ubiquitin recognition by the CUE domain of Vps9p. Cell 113: 609-620.
3. Kang, R.S., Daniels, C.M., Francis, S.A., Shih, S.C., Salerno, W.J., Hicke, L. and Radhakrishnan, I. 2003. Solution structure of a CUE-ubiquitin complex reveals a conserved mode of ubiquitin binding. Cell 113: 621-630.
4. Shih, S.C., Prag, G., Francis, S.A., Sutanto, M.A., Hurley, J.H. and Hicke, L. 2003. A ubiquitin-binding motif required for intramolecular monoubiquitylation, the CUE domain. EMBO J. 22: 1273-1281.
5. Colland, F., Jacq, X., Trouplin, V., Mougin, C., Groizeleau, C., Hamburger, A., Meil, A., Wojcik, J., Legrain, P. and Gauthier, J.M. 2004. Functional proteomics mapping of a human signaling pathway. Genome Res. 14: 1324-1332.
6. Biewenga, P., Buist, M.R., Moerland, P.D., Ver Loren van Themaat, E., van Kampen, A.H., ten Kate, F.J. and Baas, F. 2008. Gene expression in early stage cervical cancer. Gynecol. Oncol. 108: 520-526.

CHROMOSOMAL LOCATION

Genetic locus: Cuedc1 (mouse) mapping to 11 C.

PRODUCT

CUEDC1 (m): 293T Lysate represents a lysate of mouse CUEDC1 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.

PROTOCOLS

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

APPLICATIONS

CUEDC1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CUEDC1 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.