

IER2 (h4): 293T Lysate: sc-172808

BACKGROUND

IER2 (immediate early response protein 2), also known as ETR101, is a 223 amino acid protein belonging to the immediate early response (IER) family. IER proteins are the first gene products to be induced during growth stimulation and/or arrest. IER2 expression can be induced by growth factors, 12-O-tetradecanoylphorbol-13-acetate (TPA) or Okadaic acid. The coding region of IER2 contains regions of similarity to the transcription factor proteins that are encoded by the Jun oncogene family, possibly indicating a role for IER2 in transcription regulation. Further evidence for this role includes a GUUUG sequence in the 3' flanking region of IER2, which is believed to be a mRNA degradation signal similar to those found in transcription regulators.

REFERENCES

1. Shimizu, N., Ohta, M., Fujiwara, C., Sagara, J., Mochizuki, N., Oda, T. and Utiyama, H. 1991. Expression of a novel immediate early gene during 12-O-tetradecanoylphorbol-13-acetate-induced macrophagic differentiation of HL-60 cells. *J. Biol. Chem.* 266: 12157-12161.
2. Slapak, C.A., Kharbanda, S., Saleem, A. and Kufe, D.W. 1993. Defective translocation of protein kinase C in multidrug-resistant HL-60 cells confers a reversible loss of phorbol ester-induced monocytic differentiation. *J. Biol. Chem.* 268: 12267-12273.
3. Scott, J.L., Dunn, S.M., Zeng, T., Baker, E., Sutherland, G.R. and Burns, G.F. 1994. Phorbol ester-induced transcription of an immediate-early response gene by human T cells is inhibited by co-treatment with calcium ionophore. *J. Cell. Biochem.* 54: 135-144.
4. Kondratyev, A.D., Chung, K.N. and Jung, M.O. 1996. Identification and characterization of a radiation-inducible glycosylated human early-response gene. *Cancer Res.* 56: 1498-1502.
5. Wang, Y., Gong, B., Dai, W. and Lu, L. 1998. Identification of immediate early genes during TPA-induced human myeloblastic leukemia ML-1 cell differentiation. *Gene* 216: 293-302.
6. Wu, M.X., Ao, Z., Prasad, K.V., Wu, R. and Schlossman, S.F. 1998. IEX-1L, an apoptosis inhibitor involved in NF κ B-mediated cell survival. *Science* 281: 998-1001.
7. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602996. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: IER2 (human) mapping to 19p13.2.

PRODUCT

IER2 (h4): 293T Lysate represents a lysate of human IER2 transfected 293T cells and is provided as 100 μ g protein in 200 μ 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.

APPLICATIONS

IER2 (h4): 293T Lysate is suitable as a Western Blotting positive control for human reactive IER2 antibodies.

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 for detailed protocols and support products.