SANTA CRUZ BIOTECHNOLOGY, INC.

IER2 (E-19): sc-101980

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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., et al 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., et al. 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., et al. 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., et al. 1996. Identification and characterization of a radiation-inducible glycosylated human early-response gene. Cancer Res. 56: 1498-1502.
5. Wang, Y., et al. 1998. Identification of immediate early genes during TPA-induced human myeloblastic leukemia ML-1 cell differentiation. Gene 216: 293-302.
6. Wu, M.X., et al. 1998. IEX-1L, an apoptosis inhibitor involved in NFκB-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 19p13.13.

SOURCE

IER2 (E-19) is a purified rabbit polyclonal antibody raised against IER2 of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

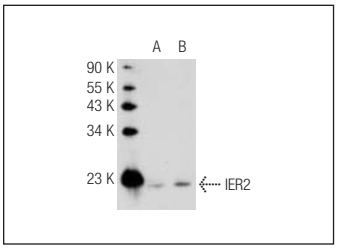
IER2 (E-19) is recommended for detection of IER2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immu-nofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IER2 siRNA (h): sc-97322, IER2 shRNA Plasmid (h): sc-97322-SH and IER2 shRNA (h) Lentiviral Particles: sc-97322-V.

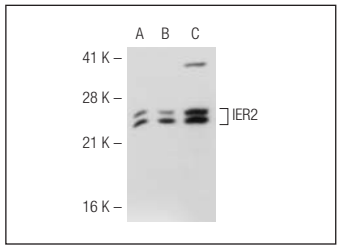
Molecular Weight of IER2: 24 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, IER2 (h2): 293T Lysate: sc-117448 or IER2 (h4): 293T Lysate: sc-172808.

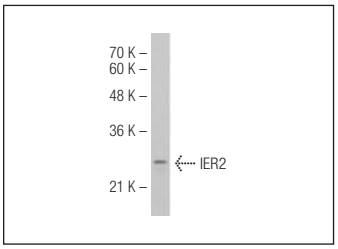
DATA



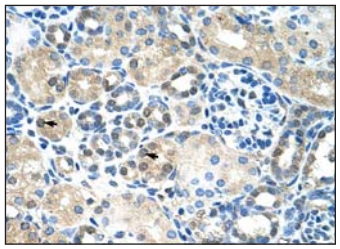
IER2 (E-19): sc-101980. Western blot analysis of IER2 expression in non-transfected: sc-117752 (**A**) and human IER2 transfected: sc-172808 (**B**) 293T whole cell lysates.



IER2 (E-19): sc-101980. Western blot analysis of IER2 expression in non-transfected 293T: sc-117752 (A), human IER2 transfected 293T: sc-117448 (B) and Hep G2 (C) whole cell lysates.



IER2 (E-19): sc-101980. Western blot analysis of IER2 expression in Hep G2 whole cell lysate.



IER2 (E-19): sc-101980. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing nuclear and cytoplasmic staining.

RESEARCH USE

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

PROTOCOLS

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