

IEX-1 (FL-156): sc-33171

BACKGROUND

Tumors are frequently observed as resistant to apoptotic induction by FAS, tumor necrosis factor α (TNF- α) or irradiation. This anti-death activity may be attributed to immediate early-response genes that are regulated at the transcriptional level, including the protein IEX-1. IEX-1 (immediately early gene X-1), also known as IER3 (immediate early response 3), DIF-2 (differentiation-dependent gene 2 protein), immediate early protein GLY96 or PRG1 (PACAP-responsive gene 1 protein), is a 156 amino acid single-pass type II membrane protein that belongs to the IER3 family. IEX-1 was originally characterized as a gene induced by ultraviolet radiation and TNF- α , which protected human squamous carcinoma cells from apoptosis. Subsequent transfection studies have also shown that expression of IEX-1 in human keratinocytes and mouse fibroblasts results in more rapid proliferation of the cells as compared with controls. The promoter region of IEX-1 contains binding motifs for both NF κ B and p53, suggesting that these proteins may regulate its expression.

REFERENCES

1. Beyaert, R., et al. 1994. Molecular mechanisms of tumor necrosis factor-induced cytotoxicity. What we do understand and what we do not. *FEBS Lett.* 340: 9-16.
2. Kondratyev, A.D., et al. 1996. Identification and characterization of a radiation-inducible glycosylated human early-response gene. *Cancer Res.* 56: 1498-1502.
3. Wu, M.X., et al. 1998. IEX-1L, an apoptosis inhibitor involved in NF κ B-mediated cell survival. *Science* 281: 998-1001.
4. Kobayashi, T., et al. 1998. Regulation of a novel immediate early response gene, IEX-1, in keratinocytes by 1 α ,25-dihydroxyvitamin D₃. *Biochem. Biophys. Res. Commun.* 251: 868-873.
5. Kumar, R., et al. 1998. A novel immediate early response gene, IEX-1, is induced by ultraviolet radiation in human keratinocytes. *Biochem. Biophys. Res. Commun.* 253: 336-341.

CHROMOSOMAL LOCATION

Genetic locus: IER3 (human) mapping to 6p21.33; Ier3 (mouse) mapping to 17 B1.

SOURCE

IEX-1 (FL-156) is a rabbit polyclonal antibody raised against amino acids 1-156 representing full length IEX-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

IEX-1 (FL-156) is recommended for detection of IEX-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IEX-1 (FL-156) is also recommended for detection of IEX-1 in additional species, including porcine.

Suitable for use as control antibody for IEX-1 siRNA (h): sc-43859, IEX-1 siRNA (m): sc-146148, IEX-1 shRNA Plasmid (h): sc-43859-SH, IEX-1 shRNA Plasmid (m): sc-146148-SH, IEX-1 shRNA (h) Lentiviral Particles: sc-43859-V and IEX-1 shRNA (m) Lentiviral Particles: sc-146148-V.

Molecular Weight (predicted) of IEX-1: 17 kDa.

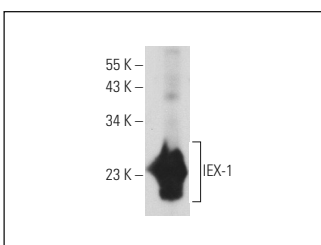
Molecular Weight (observed) of IEX-1: 23 kDa.

Positive Controls: C32 whole cell lysate: sc-2205.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz MarkerTM Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruzTM Mounting Medium: sc-24941.

DATA



IEX-1 (FL-156): sc-33171. Western blot analysis of IEX-1 expression in C32 whole cell lysate.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **IEX-1 (E-2): sc-515605**, our highly recommended monoclonal alternative to IEX-1 (FL-156).