

ESE-1 (Z-23): sc-133563

BACKGROUND

ESE-1, a member of the Ets family of transcription factors, critically regulates epithelial cell differentiation and mediates vascular inflammation. ESE-1 is strongly expressed in vascular endothelium and smooth muscle cells, where it is induced in response to inflammatory cytokines and lipopolysaccharides, interacts with NF κ B to induce nitric oxide synthase, and is induced during terminal differentiation of epidermal and primary keratinocytes. In addition, ESE-1 is upregulated upon differentiation of corneal epithelium and interacts with Sp1 and AP-1 proteins to induce squamous differentiation marker expression in bronchial epithelial cells.

REFERENCES

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- Reddy, S.P., et al. 2003. Interplay between proximal and distal promoter elements is required for squamous differentiation marker induction in the bronchial epithelium: role for ESE-1, Sp1, and AP-1. *J. Biol. Chem.* 278: 21378-21387.
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- Wang, H., et al. 2004. Positive and negative modulation of the transcriptional activity of the Ets factor ESE-1 through interaction with p300, CREB-binding protein, and Ku-70/Ku-86. *J. Biol. Chem.* 279: 25241-25250.

CHROMOSOMAL LOCATION

Genetic locus: ELF3 (human) mapping to 1q32.1.

SOURCE

ESE-1 (Z-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic ESE-1 peptide of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

ESE-1 (Z-23) is recommended for detection of ESE-1 of human and rat 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ESE-1 siRNA (h): sc-37851, ESE-1 shRNA Plasmid (h): sc-37851-SH and ESE-1 shRNA (h) Lentiviral Particles: sc-37851-V.

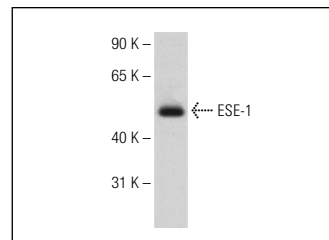
Molecular Weight of ESE-1: 47 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, human fetal thymus tissue extract or A-431 whole cell lysate: sc-2201.

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).

DATA



ESE-1 (Z-23): sc-133563. Western blot analysis of ESE-1 expression in human fetal thymus tissue extract.

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.

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Try **ESE-1 (E-8): sc-376055**, our highly recommended monoclonal alternative to ESE-1 (Z-23).