

TIEG1 (C-14): sc-34544

BACKGROUND

Originally isolated from osteoblastic cells, the TGF β -inducible early gene-1 (TIEG1) is a Krüpel-like zinc finger transcription factor-encoding gene which regulates cellular growth and differentiation. TIEG1 is regulated as an early response gene by TGF β 1. It is expressed in both acinar and ductular epithelial cells from exocrine pancreas and may serve as an early response gene in pancreatic cell lines. Further, overexpression of TIEG1 in TGF β -sensitive epithelial cells induces apoptosis. TIEG1 and EGR α are expressed from alternate promoters of the same gene. Both are highly expressed in human fetal osteoblast cells. TIEG1 is additionally expressed at high levels in PBLs, spleen and colon, and at lower levels in thymus, small intestine, ovary, prostate and skeletal muscle. The nuclear TIEG2 protein, which shares significant homology with TIEG1, was originally isolated from globin-expressing human fetal erythroid cells. TIEG2 is also expressed in fetal liver. Overexpression of TIEG2 in cultured epithelial cells inhibits cellular proliferation. TIEG2 expression is upregulated by TGF β 1 and serum deprivation.

CHROMOSOMAL LOCATION

Genetic locus: KLF10 (human) mapping to 8q22.3; Klf10 (mouse) mapping to 15 B3.1.

SOURCE

TIEG1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TIEG1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-34544 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-34544 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TIEG1 (C-14) is recommended for detection of TIEG1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (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).

TIEG1 (C-14) is also recommended for detection of TIEG1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TIEG1 siRNA (h): sc-45463, TIEG1 siRNA (m): sc-45464, TIEG1 shRNA Plasmid (h): sc-45463-SH, TIEG1 shRNA Plasmid (m): sc-45464-SH, TIEG1 shRNA (h) Lentiviral Particles: sc-45463-V and TIEG1 shRNA (m) Lentiviral Particles: sc-45464-V.

TIEG1 (C-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TIEG1: 52 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



TIEG1 (C-14): sc-34544. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Zhang, W., et al. 2013. Klf10 inhibits IL-12p40 production in macrophage colony-stimulating factor-induced mouse bone marrow-derived macrophages. *Eur. J. Immunol.* 43: 258-269.

STORAGE

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

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.

MONOS
Satisfaction
Guaranteed

Try **TIEG1 (95-D): sc-130408**, our highly recommended monoclonal alternative to TIEG1 (C-14).