SANTA CRUZ BIOTECHNOLOGY, INC.

Elf-4 (S-15): sc-132292

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The Power to Question

BACKGROUND

The Ets-1 family of transcription factors has a conserved DNA binding domain through which it plays an important role in cellular proliferation, differentiation, tematopoiesis and angiogenesis. This domain, also known as the Ets domain, binds to DNA sequences containing the consensus sequence 5'-WGGA-3', which is known as the Ets-binding domain. Elf-4, also known as myeloid Elf-1-like factor, ELF4 or MEF, is a 663 amino acid member of the Ets-1 family. Localized to the nucleus, Elf-4 is highly expressed in placenta and myeloid leukemia cells, with lower levels of expression lung, heart, thymus, slpeen, colon, ovary and peripheral blood lymphocytes. Functioning primarily to activate the promoters of hematopoietic growth factor genes, such as GM-CSF, IL-3 and IL-8, Elf-4 has also been shown to activate the perforin 1 promoter in natural killer (NK) cells, suggesting a possible role in tumorigenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ELF4 (human) mapping to Xq26.1; Elf4 (mouse) mapping to X A4.

SOURCE

Elf-4 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Elf-4 of human origin.

PRODUCT

Each vial contains 200 µg 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-132292 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-132292 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Elf-4 (S-15) is recommended for detection of Elf-4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Elf-1 or Elf-5.

Elf-4 (S-15) is also recommended for detection of Elf-4 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Elf-4 siRNA (h): sc-91302, Elf-4 siRNA (m): sc-144630, Elf-4 shRNA Plasmid (h): sc-91302-SH, Elf-4 shRNA Plasmid (m): sc-144630-SH, Elf-4 shRNA (h) Lentiviral Particles: sc-91302-V and Elf-4 shRNA (m) Lentiviral Particles: sc-144630-V.

Elf-4 (S-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Elf-4: 71 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

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™ 7Molecular 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.

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.