SANTA CRUZ BIOTECHNOLOGY, INC.

Eos (H-70): sc-292209

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Ikaros family members, including Ikaros and Helios, are nuclear factors that colocalize with DNA replication machinery components in higher-order chromatin structures and respond to signaling events, such as T cell activation. Helios and Ikaros bind to similar DNA sequences and they function as hemopoietic-specific transcription factors. Members of the Ikaros family contain zinc-finger domains that are involved in DNA-binding and in the formation of homodimers and heterodimers between Ikaros family members. Eos, also known as zinc finger protein Ikaros 4, is a 585 amino acid transcriptional repressor. Localized to the nucleus, Eos may play a role in the development of the central and peripheral nervous systems. Eos self-associates, forms heterodimers with Ikaros family members and interacts with CtBP2, PU.1 and MITF to repress transcription of cathepsin K and TRAP promoters. Eos is expressed at low levels in kidney, thymus, liver and heart, and at high levels in skeletal muscle.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IKZF4 (human) mapping to 12q13.2; Ikzf4 (mouse) mapping to 10 D3.

SOURCE

Eos (H-70) is a rabbit polyclonal antibody raised against amino acids 461-530 mapping near the C-terminus of Eos of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

Eos (H-70) is recommended for detection of Eos isoforms 1 and 2 of mouse, rat and 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)], 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).

Eos (H-70) is also recommended for detection of Eos isoforms 1 and 2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Eos siRNA (h): sc-95685, Eos siRNA (m): sc-146199, Eos shRNA Plasmid (h): sc-95685-SH, Eos shRNA Plasmid (m): sc-146199-SH, Eos shRNA (h) Lentiviral Particles: sc-95685-V and Eos shRNA (m) Lentiviral Particles: sc-146199-V.

Eos (H-70) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Eos: 58 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or NIH/3T3 whole cell lysate: sc-2210.

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 Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) 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 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.

PROTOCOLS

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