**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 hematopoietic-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**


**CHROMOSOMAL LOCATION**

Genetic locus: IKZF4 (human) mapping to 12q13.2; Ikrf4 (mouse) mapping to 10 D3.

**SOURCE**

Eos (D-17) is a purified rabbit polyclonal antibody raised against an N-terminal region of Eos of human origin.

**RESEARCH USE**

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

**PRODUCT**

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

**APPLICATIONS**

Eos (D-17) is recommended for detection of Eos 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)) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Eos (D-17) is also recommended for detection of Eos in additional species, including equine, bovine and canine.


Molecular Weight of Eos: 58 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

**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).

**DATA**

Eos (D-17): sc-101983. Western blot analysis of Eos expression in Hep G2 whole cell lysate.

**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.