

Helios (M-20): sc-9864

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. Expression of Ikaros is primarily detected in the thymus and spleen, where it is essential for regulating T-cell specific gene transcription and for the differentiation and commitment of early hemopoietic progenitors to the B and T lymphoid lineages. Similarly, Helios expression is detected primarily in T cells and in the earliest embryonic hemopoietic precursors and in adult stem cells. Ikaros and Helios also appear to regulate cell cycle entry by inducing transcriptional repression under varying conditions and, thereby, mediate T cell activation and IL-2 mediated signaling events.

CHROMOSOMAL LOCATION

Genetic locus: IKZF2 (human) mapping to 2q34; Ikzf2 (mouse) mapping to 1 C3.

SOURCE

Helios (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Helios of mouse 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-9864 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-9864 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Helios (M-20) is recommended for detection of Helios 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).

Helios (M-20) is also recommended for detection of Helios in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Helios siRNA (h): sc-38007, Helios siRNA (m): sc-38008, Helios shRNA Plasmid (h): sc-38007-SH, Helios shRNA Plasmid (m): sc-38008-SH, Helios shRNA (h) Lentiviral Particles: sc-38007-V and Helios shRNA (m) Lentiviral Particles: sc-38008-V.

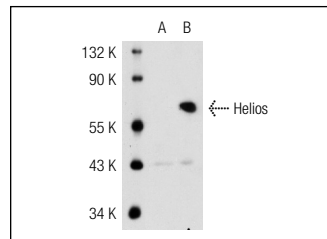
Helios (M-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: Helios (h): 293T Lysate: sc-114603.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Helios (M-20): sc-9864. Western blot analysis of Helios expression in non-transfected: sc-117752 (A) and human Helios transfected: sc-114603 (B) 293T whole cell lysates.

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.



Try **Helios (E-7): sc-390357** or **Helios (H-1): sc-390358**, our highly recommended monoclonal alternatives to Helios (M-20).