

# Aiolos (O-21): sc-101982

## 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 hemo-poietic-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. Aiolos, also known as zinc finger protein Ikaros 3 or ZNFN1A3, is a 509 amino acid nuclear protein. Aiolos plays an important role in lymphocyte differentiation regulation and, via this role, mutated Aiolos is implicated in leukemogenesis. Expressed in most tissues, Aiolos is predominantly found in spleen, thymus and peripheral blood leukocytes. Aiolos contains six C<sub>2</sub>H<sub>2</sub>-type zinc fingers, a motif commonly involved in nucleotide binding. Aiolos interacts with Ikaros family members, including Eos and Pegasus.

## CHROMOSOMAL LOCATION

Genetic locus: IKZF3 (human) mapping to 17q12.

## SOURCE

Aiolos (O-21) is a purified rabbit polyclonal antibody raised against an N-terminal portion of Aiolos of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## STORAGE

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

## APPLICATIONS

Aiolos (O-21) is recommended for detection of Aiolos 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), 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).

Aiolos (O-21) is also recommended for detection of Aiolos in additional species, including bovine, porcine and canine.

Suitable for use as control antibody for Aiolos siRNA (h): sc-93817, Aiolos siRNA (m): sc-38006, Aiolos shRNA Plasmid (h): sc-93817-SH, Aiolos shRNA Plasmid (m): sc-38006-SH, Aiolos shRNA (h) Lentiviral Particles: sc-93817-V and Aiolos shRNA (m) Lentiviral Particles: sc-38006-V.

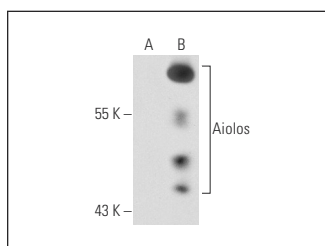
Molecular Weight of Aiolos: 58 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Aiolos (h): 293T Lysate: sc-115233.

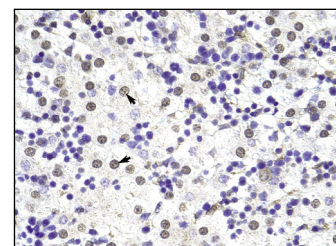
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



Aiolos (O-21): sc-101982. Western blot analysis of Aiolos expression in non-transfected: sc-117752 (A) and human Aiolos transfected: sc-115233 (B) 293T whole cell lysates.



Aiolos (O-21): sc-101982. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing nuclear and cytoplasmic staining.

## SELECT PRODUCT CITATIONS

- Ouellet, D.L., et al. 2013. Regulation of host gene expression by HIV-1 TAR microRNAs. *Retrovirology* 10: 86.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Aiolos (3H5-G7): sc-293421**, our highly recommended monoclonal alternative to Aiolos (O-21).