

# Pegasus (D-18): sc-101984

## 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. Pegasus, also known as zinc finger protein Ikaros 5, is a 419 amino acid transcriptional repressor. Localized to the nucleus, Pegasus binds to the 5'GNNTGTNG-3' DNA core sequence. Pegasus contains 5 C<sub>2</sub>H<sub>2</sub>-type zinc finger domains. The C-terminal zinc finger domains participate in homodimerization and the N-terminal domains participate in heterodimerization with Ikaros family members and DNA binding. Pegasus is expressed in many tissues including kidney, heart, skeletal muscle, brain and liver.

## REFERENCES

1. Perdomo, J., et al. 2000. Eos and pegasus, two members of the Ikaros family of proteins with distinct DNA binding activities. *J. Biol. Chem.* 275: 38347-38354.
2. Nishii, K., et al. 2002. Non-DNA-binding Ikaros isoform gene expressed in adult B-precursor acute lymphoblastic leukemia. *Leukemia* 16: 1285-1292.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606238. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Yoshida, T., et al. 2006. Early hematopoietic lineage restrictions directed by Ikaros. *Nat. Immunol.* 7: 382-391.
5. Ng, S.Y., et al. 2007. Ikaros and chromatin regulation in early hematopoiesis. *Curr. Opin. Immunol.* 19: 116-122.
6. Ronni, T., et al. 2007. Human Ikaros function in activated T cells is regulated by coordinated expression of its largest isoforms. *J. Biol. Chem.* 282: 2538-2547.

## CHROMOSOMAL LOCATION

Genetic locus: IKZF5 (human) mapping to 10q26.13; lkzf5 (mouse) mapping to 7 F3.

## SOURCE

Pegasus (D-18) is a purified rabbit polyclonal antibody raised against Pegasus 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

Pegasus (D-18) is recommended for detection of Pegasus of mouse, rat, human and dog 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).

Suitable for use as control antibody for Pegasus siRNA (h): sc-90477, Pegasus siRNA (m): sc-146200, Pegasus shRNA Plasmid (h): sc-90477-SH, Pegasus shRNA Plasmid (m): sc-146200-SH, Pegasus shRNA (h) Lentiviral Particles: sc-90477-V and Pegasus shRNA (m) Lentiviral Particles: sc-146200-V.

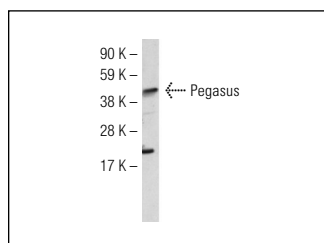
Molecular Weight of Pegasus: 47 kDa.

Positive Controls: fetal muscle tissue extract.

## 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



Pegasus (D-18): sc-101984. Western blot analysis of Pegasus expression in fetal muscle tissue extract.

## 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.