

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human Helios in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Helios Ile6-Gln97 Accession # Q9UKS7
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Immunoprecipitated material from Jurkat human acute T cell leukemia cell line lysates and MOLT-4 human acute lymphoblastic leukemia cell line lysates
Immunoprecipitation	4 µg/mL	See Below

DATA

<p>Immunoprecipitation</p>	<p>Immunoprecipitation of Human Helios. Helios was immunoprecipitated from 400 µg of Jurkat human acute T cell leukemia cell line and MOLT-4 human acute lymphoblastic leukemia cell line lysates using 4 µg of Sheep Anti-Human Helios Antigen Affinity-purified Polyclonal Antibody (Catalog # AF73091) coated on 4 wells of a 96 well plate (Corning Costar EIA/RIA). Jurkat lysates, MOLT-4 lysates, or control buffer were added to the wells and incubated for 2 hours at room temperature. Immunoprecipitated Helios was detected by Western blot under reducing conditions using 0.1 µg/mL Sheep Anti-Human Helios Antigen Affinity-purified Polyclonal Antibody (Catalog # AF73091) and Immunoblot Buffer Group 1. View our recommended buffer recipes for Immunoprecipitation.</p>	<p>Immunoprecipitation</p>	<p>Immunoprecipitation of Human Helios. Helios was immunoprecipitated from 400 µg of Jurkat human acute T cell leukemia cell line and MOLT-4 human acute lymphoblastic leukemia cell line lysates using 4 µg of Sheep Anti-Human Helios Antigen Affinity-purified Polyclonal Antibody (Catalog # AF73091) coated on 4 wells of a 96 well plate (Corning Costar EIA/RIA). Jurkat or MOLT-4 lysates were added to the wells and incubated for 2 hours at room temperature. Immunoprecipitated Helios was detected by Western blot under reducing conditions using 0.1 µg/mL Mouse Anti-Human Helios Monoclonal Antibody (Catalog # MAB73091) and Immunoblot Buffer Group 1. View our recommended buffer recipes for Immunoprecipitation.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Helios, also known as IKZF2, is a 70 kDa DNA-binding transcription regulator in the Ikaros family that contains four N-terminal C2H2-type zinc finger domains (amino acids 112-219) and two C-terminal zinc finger domains (amino acids 471-523). Helios is expressed in developing hematopoietic and epithelial tissues and in adult T cells and thymic-derived regulatory T cells (Treg). It forms homodimers and also heterodimers with other Ikaros family proteins Ikaros, Pegasus, Eos, and Aiolos. Alternate splicing of human Helios generates a short isoform that lacks three of the the N-terminal zinc finger domains. This isoform is overexpressed in T cell leukemias where it can still dimerize with Ikaros proteins but functions as a dominant negative regulator. Within amino acids 6-97, human and mouse Helios share 96% aa sequence identity.