# Human Helios Antibody

Monoclonal Mouse $IgG_1$ Clone # 736423

Catalog Number: MAB73091

## DESCRIPTION

| | |
|---|---|
| **Species Reactivity** | Human |
| **Specificity** | Detects human Helios in direct ELISAs. |
| **Source** | Monoclonal Mouse $IgG_1$ Clone # 736423 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | *E. coli*-derived recombinant human Helios<br>Thr3-Gln97<br>Accession # Q9UKS7 |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS. |

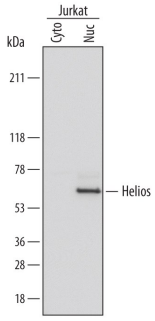
## APPLICATIONS

**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** | 1 µg/mL | See Below |

## DATA

### Western Blot




**Detection of Human Helios by Western Blot.** Western blot shows lysates of Jurkat human acute T cell leukemia cell line. Gels were loaded with 30 µg of cytoplasmic (Cyto) and 15 µg of nuclear (Nuc) extracts. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Helios Monoclonal Antibody (Catalog # MAB73091) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Helios at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

## PREPARATION AND STORAGE

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|---|---|
| **Reconstitution** | Sterile PBS to a final concentration of 0.5 mg/mL. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*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.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 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 (aa 112-219) and two C-terminal zinc finger domains (aa 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 aa 1-97, human and mouse Helios share 96% aa sequence identity.