**PE Armenian Hamster Anti-Helios**

**Product Information**

**Material Number:** 563801

**Alternate Name:** Ikaros family zinc finger protein 2; ANF1A2; HELIOS; ZNF1A2; ZNFN1A2

**Size:** 50 µg

**Concentration:** 0.2 mg/ml

**Clone:** 22F6

**Immunogen:** Mouse Helios Peptide

**Isotype:** Armenian Hamster IgG

**Reactivity:** Tested in Development: Mouse

**Storage Buffer:** Aqueous buffered solution containing ≤0.09% sodium azide.

**Description**

The 22F6 monoclonal antibody specifically binds to mouse and human Helios. Helios is a member of the Ikaros family of zinc-finger transcription factors, which play important roles in hematopoietic cell development and tumor suppression. Helios expression is restricted to the earliest stages of embryonic hematopoiesis, a variety of epithelial tissues and is notably increased in thymic-derived regulatory CD4+Foxp3+ T (Treg) cells. Its high expression levels in Treg cells are independent from Foxp3 and are believed to contribute, along with other transcription factors, to the phenotypic stability of natural regulatory T cells. Accordingly, it has been demonstrated that Helios directly stimulates Foxp3 transcription while it inhibits I2 gene expression, contributing for the maintenance of cellular anergy. Helios is also differentially expressed during negative and positive selection in the thymus, marking CD4+ autoreactive cells for deletion. Helios may possibly play roles in T cell activation, since it is upregulated in Th2 and Th1 cells. Despite these roles in T cell development and function, Helios genetic ablation in mice revealed no significant abnormalities in Treg or other T cell subsets. This finding suggests that other Ikaros family members may play redundant roles.

**Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

**Application Notes**

**Application**

| Intracellular staining (flow cytometry) | Routinely Tested |

**BD Biosciences**

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Product Notices
1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References