

PE/Cy7 anti-mouse/human Helios

Catalog # / Size: 1286180 / 100 tests
1286175 / 25 tests

Clone: 22F6

Isotype: Hamster IgG

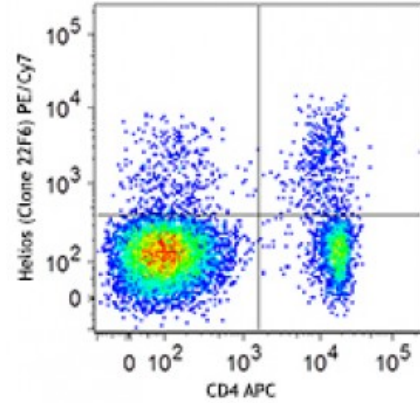
Immunogen: Helios peptide (aa 51-107)

Reactivity: Human, Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



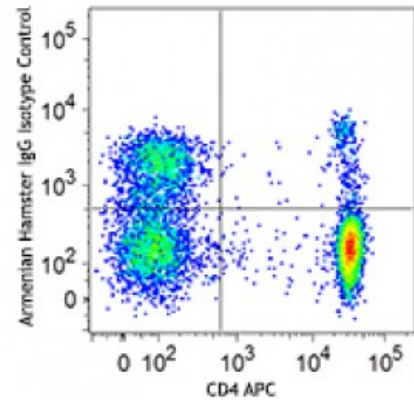
C57BL/6 splenocytes were surface stained with CD4 APC and then treated with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with Helios (clone 22F6) PE/Cy7.

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by intracellular flow cytometry. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: **NOTE:** For flow cytometric staining with this clone, True-Nuclear™ Transcription Factor Buffer Set (Cat. No. [424401](#)) offers improved staining and is highly recommended over the Foxp3 Fix/Perm Buffer Set (Cat. No. 421403) and the Nuclear Factor Fixation and Permeabilization Buffer Set (Cat. No. 422601).



Human peripheral blood lymphocytes were surface stained with CD4 APC and then treated with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with Helios (clone 22F6) PE/Cy7.

- Application References:**
1. Thornton AM, *et al.* 2010. *J. Immunol.* 184:1. [PubMed](#)
 2. Verhagen J and Wraith D. 2010. *J. Immunol.* 185:7129.
 3. Stone B, *et al.* 2012. *Clin Immunol.* 145:153. [PubMed](#)
 4. Vaeth M, *et al.* 2012. *PNAS.* 109:16258. [PubMed](#)
 5. Angin M, *et al.* 2014. *PLoS One.* 9:86920. [PubMed](#)
 6. Bedke T, *et al.* 2014. *Immunol Cell Biol.* [PubMed](#)
 7. Liu Y, *et al.* 2014. *Am J Physiol Gastrointest Liver Physiol.* 307:177. [PubMed](#)
 8. Verhagen J and Wraith DC. 2014. *J. Immunol. Methods.* S0022. (FC) [PubMed](#)

Description: Helios is a member of the Ikaros family of zinc finger transcription factors. It

contains a C-terminal region composed of 2 zinc-finger domains that mediate dimerization between the family members. Helios was originally cloned from a mouse thymoma line. It is mainly expressed in peripheral T cells and thymocytes. It is found at high levels in a subpopulation of regulatory T cells. Helios plays an important role in T cell development and homeostasis. Overexpression of Helios profoundly alters $\alpha\beta$ T cell differentiation and activation. It has been determined that silencing of Helios in B cells is critical for maintaining normal B cell function. Helios is also involved in tumor immunity.

**Antigen
References:**

1. Kelly CM, *et al.* 1998. *Curr. Biol.* 8:508.
2. Dovat S, *et al.* 2005. *J. Immunol.* 175:3508.
3. Cortes M, *et al.* 1999. *Curr. Opin. Immunol.* 11:167.
4. Cai Q, *et al.* 2009