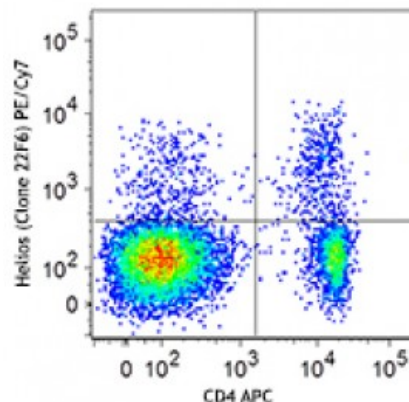


PE/Cy7 anti-mouse/human Helios

Catalog # / Size:	1286175 / 25 tests 1286180 / 100 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:	0.2

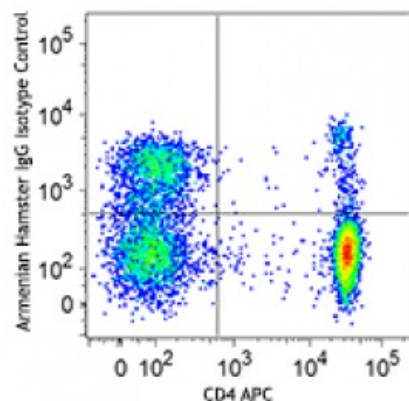


C57BL/6 splenocytes were surface stained with CD4 APC and then treated with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with Helios (clone 22F6) PE/Cy7.

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:	<ol style="list-style-type: none"> Thornton AM, <i>et al.</i> 2010. <i>J. Immunol.</i> 184:1. PubMed Verhagen J and Wraith D. 2010. <i>J. Immunol.</i> 185:7129. Stone B, <i>et al.</i> 2012. <i>Clin Immunol.</i> 145:153. PubMed Vaeth M, <i>et al.</i> 2012. <i>PNAS.</i> 109:16258. PubMed Angin M, <i>et al.</i> 2014. <i>PLoS One.</i> 9:86920. PubMed Bedke T, <i>et al.</i> 2014. <i>Immunol Cell Biol.</i> PubMed Liu Y, <i>et al.</i> 2014. <i>Am J Physiol Gastrointest Liver Physiol.</i> 307:177. PubMed Verhagen J and Wraith DC. 2014. <i>J. Immunol. Methods.</i> 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