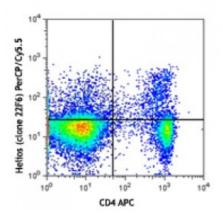
## **Product Data Sheet**

## PerCP/Cy5.5 anti-mouse/human Helios

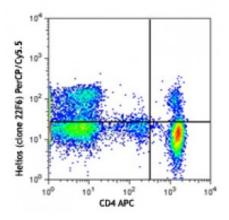
Catalog # / Size:	1286150 / 100 tests 1286145 / 25 tests
Clone:	22F6
Isotype:	Hamster IgG
Immunogen:	Helios peptide (aa 51-107)
<b>Reactivity:</b>	Human,Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Concentration:</b>	Lot-specific



C57BL/6 splenocytes were stained with CD4 APC, and then stained with Helios (clone 22F6) PerCP/Cy5.5.

## **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.
	* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes:	NOTE: For flow cytometric staining with this clone, True-Nuclear <sup>™</sup> Transcription Factor Buffer Set (Cat. No. <u>424401</u> ) 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 stained with CD4 APC, and then stained with Helios (clone 22F6) PerCP/Cy5.5.

Application	1. Thornton AM, <i>et al.</i> 2010. <i>J. Immunol.</i> 184:1. <u>PubMed</u>
<b>References:</b>	2. Verhagen J and Wraith D. 2010. J. Immunol. 185:7129.
	3. Stone B, <i>et al.</i> 2012. <i>Clin Immunol.</i> 145:153. <u>PubMed</u>
	4. Vaeth M, <i>et al.</i> 2012. <i>PNAS.</i> 109:16258. <u>PubMed</u>
	5. Angin M, <i>et al.</i> 2014. <i>PLoS One.</i> 9:86920. <u>PubMed</u>
	6. Bedke T, <i>et al.</i> 2014. <i>Immunol Cell Biol. <u>PubMed</u></i>
	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

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products. Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com **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	1. Kelly CM, <i>et al.</i> 1998. <i>Curr. Biol</i> . 8:508.
<b>References:</b>	2. Dovat S, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:3508.
	3. Cortes M, et al. 1999. Curr. Opin. Immunol. 11:167.
	4. Cai Q, <i>et al.</i> 2009