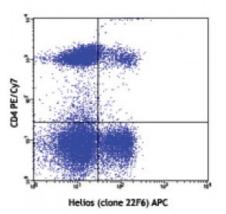
## **Product Data Sheet**

## **APC anti-mouse/human Helios**

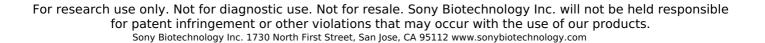
Catalog # / Size:	1286110 / 100 tests 1286105 / 25 tests
Clone:	22F6
Isotype:	Hamster IgG
Immunogen:	Helios peptide (aa 51-107)
<b>Reactivity:</b>	Human,Mouse
Preparation:	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC 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



Human peripheral blood lymphocytes surface stained with CD4-PE/Cy7, and then were intracellularly stained with Helios-APC (clone 22F6).

## **Applications:**

Applications:	Flow Cytometry		
Recommended Usage:	Each lot of this antibody is quality control tested by intracellular flow cytometry . <b>Test size products are transitioning</b> <b>from 20 microL to 5 microL per test</b> . Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.	Helios (clone 22F6) APC C57BL/6 mouse splenocytes surface stained with CD4-PE/Cy7, and then	
Application Notes:	<b>NOTE</b> : 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).	were intracellularly stained with Helios-APC (clone 22F6).	
Application References:	<ol> <li>Thornton AM, <i>et al.</i> 2010. <i>J. Immunol.</i> 184:1. PubMed</li> <li>Verhagen J and Wraith D. 2010. <i>J. Immunol.</i> 185:7129.</li> <li>Stone B, <i>et al.</i> 2012. <i>Clin Immunol.</i> 145:153. PubMed</li> <li>Vaeth M, <i>et al.</i> 2012. <i>PNAS.</i> 109:16258. PubMed</li> <li>Angin M, <i>et al.</i> 2014. <i>PLoS One.</i> 9:86920. PubMed</li> <li>Bedke T, <i>et al.</i> 2014. <i>Immunol Cell Biol.</i> PubMed</li> <li>Liu Y, <i>et al.</i> 2014. <i>Am J Physiol Gastrointest Liver Physiol.</i> 307:177. PubMed</li> <li>Verhagen J and Wraith DC. 2014. <i>J. Immunol. Methods.</i> S0022. (FC) PubMed</li> </ol>		



**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, et al. 1998. Curr. Biol. 8:508.

 References:
 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