SONY

Product Data Sheet

Alexa Fluor® 647 anti-mouse/human Helios

Catalog # / Size: 1286040 / 25 tests
1286090 / 100 tests

Clone: 22F6

Isotype: Hamster IgG

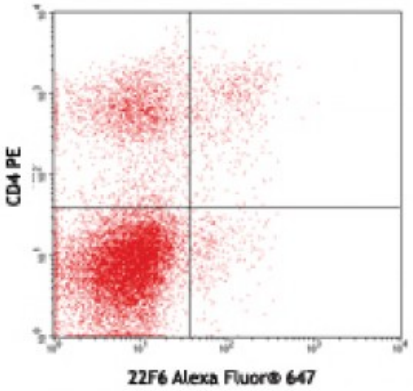
Immunogen: Helios peptide (aa 51-107)

Reactivity: Human,Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.

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

Concentration: NULL



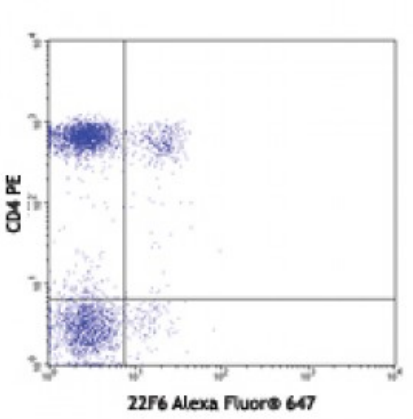
C57BL/6 splenocytes surface stained with CD4-PE (GK1.5), and then intracellularly stained with Helios-Alexa Fluor® 647 (clone 22F6).

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 10^6 cells in 100 microL volume or 5 microL per 100 microL whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.



Human peripheral blood lymphocytes surface stained with CD4-PE (clone RPA-T4), and then intracellulary stained with Helios-Alexa Fluor® 647 (clone 22F6).

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).

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 αβ 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