SONY

Product Data Sheet

Alexa Fluor® 647 anti-mouse/human Helios

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

Clone: 22F6

Isotype: Hamster IgG

Immunogen: Helios peptide (aa 51-107)

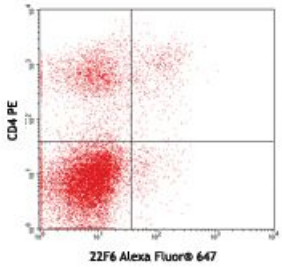
Reactivity: Human, Mouse

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

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

Workshop Number: VII 70322

Concentration: NULL



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

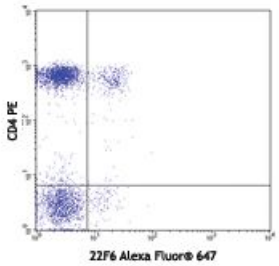
Applications:

Applications: Intracellular Staining for 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 µl per 10^6 cells in 100 µl volume or 5 µl per 100 µl 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.

Application Notes: **NOTE**: For flow cytometric staining with this clone, True-Nuclear™ Transcription Factor Buffer Set offers improved staining and is highly recommended.



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

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

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 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. *J. Immunol.* 183:2303.
5. Zhang Z, *et al.* 2007. *Blood* 109:2190.
6. Hahm K, *et al.* 1998. *Genes Dev*. 12:782.

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.