Product Data Sheet

PE/Dazzle™ 594 anti-mouse/human Helios

Catalog # / Size: 1286160 / 100 tests

1286155 / 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 PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

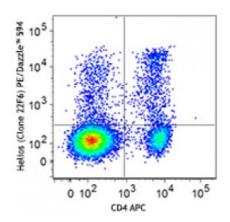
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



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/Dazzle™ 594.

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.

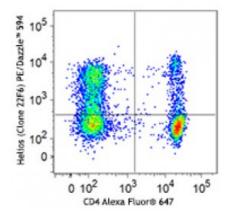
* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

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 Alexa Fluor® 647 and then treated with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with Helios (clone 22F6) PE/Dazzle™ 594.

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 / Physiol Gastrointest Liver Physiol. 307:177. 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