Anti-Mouse/Rat Foxp3 eFluor® 605NC (for IHC/ICC)

Catalog Number: IH93-5773
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Mouse/Rat Foxp3 eFluor® 605NC (for IHC/ICC)
REF **Catalog Number:** IH93-5773
Clone: FJK-16s
Host/Isotype: Rat IgG2a, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

Description

The FJK-16s antibody reacts with mouse, rat, dog, porcine, bovine and cat Foxp3 also known as FORKHEAD BOX P3, SCURFIN, and JM2; cross reactivity of this antibody to other proteins has not been determined. Foxp3, a 49-55 kDa protein, is a member of the forkhead/winged-helix family of transcriptional regulators, and was identified as the gene defective in 'scurfy' (sf) mice. Constitutive high expression of foxP3 mRNA has been shown in CD4+CD25+ regulatory T cells (Treg cells), and ectopic expression of foxp3 in CD4+CD25- cells imparts a Treg phenotype in these cells.

Immunoblotting with FJK-16s antibody has mapped the epitope to amino acids 75-125 of the mouse Foxp3 protein. In the human, this region has been shown to be alternatively spliced at the mRNA level. Both the alternatively-spliced and non-spliced isoforms are present in the CD4+CD25+ subset of lymphocytes. Preliminary RT-PCR experiments have not revealed this alternatively-spliced isoform in mouse splenocytes, suggesting different gene regulation in the mouse and human.

Applications Reported

This FJK-16s antibody has been reported for use in immunohistochemical staining of frozen and paraffin-embedded tissue sections (IHC-F, IHC-P) and immunocytochemistry (ICC).

Applications Tested

This FJK-16s antibody has been tested by immunohistology of frozen mouse spleen using the IHC/ICC Blocking Buffer - High Protein (cat. 00-4952). This antibody can be used at 1:100.

For answers to additional questions refer to for IHC/ICC protocols and eFluor Nanocrystal Frequently Asked Questions

Applications: This product has been optimized for use in immunohistochemistry and immunocytochemistry. We do not recommend its use in flow cytometry.

Filter Recommendation: When using this eFluor® 605NC antibody conjugate, we recommend a filter that will capture the 605 emission wavelength, such as a 605/20 or 600/20. Please refer to Technical Support FAQ for more information.

Buffer Recommendation: We recommend the use of TBS-based solutions when performing IHC/ICC with eFluor® NC conjugated antibodies. We offer several products: IHC /ICC Blocking Buffer - Low Protein (cat. 00-4953), and IHC /ICC Blocking Buffer – High Protein (cat. 00-4952) which is optimal when staining FFPE sections or when using eFluor® nanocrystal conjugates to nuclear targets.

Mounting Recommendation: For optimal results, we recommend the use of Fluoromount-G™ (cat. 00-4958) when mounting slides.

References

Habicht A, Dada S, Jurewicz M, Fife BT, Yagita H, Azuma M, Sayegh MH, Guleria I. A link between PDL1 and T

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.ebioscience.com • info@ebioscience.com

Anti-Mouse/Rat Foxp3 eFluor® 605NC (for IHC/ICC)

Catalog Number: IH93-5773
RUO: For Research Use Only. Not for use in diagnostic procedures.

regulatory cells in fetomaternal tolerance. J Immunol. 2007 Oct 15;179(8):5211-9. (**FJK-16s**, IHC Frozen)

Heimesaat MM, Fischer A, Siegmund B, Kupz A, Niebergall J, Fuchs D, Jahn HK, Freudenberg M, Loddenkemper C, Batra A, Lehr HA, Liesenfeld O, Blaut M, Göbel UB, Schumann RR, Bereswill S. Shift towards pro-inflammatory intestinal bacteria aggravates acute murine colitis via Toll-like receptors 2 and 4. PLoS ONE. 2007 Jul 25;2(7):e662. (**FJK-16s**, IHC paraffin)

Leithäuser F, Meinhardt-Krajina T, Fink K, Wotschke B, Möller P, Reimann J. Foxp3-expressing CD103+ regulatory T cells accumulate in dendritic cell aggregates of the colonic mucosa in murine transfer colitis. Am J Pathol. 2006 Jun;168(6):1898-909. (**FJK-16s**, IHC paraffin)

Kohm AP, McMahon JS, Podojil JR, Begolka WS, Degutes M, Kasprowicz DJ, Ziegler SF, Miller SD. Cutting Edge: Anti-CD25 Monoclonal Antibody Injection Results in the Functional Inactivation, Not Depletion, of CD4+CD25+ T Regulatory Cells. J Immunol. 2006 Mar 15;176(6):3301-5. (**FJK-16s**, IHC Frozen)

Suvas S, Azkur AK, Rouse BT.Qa-1b and CD94-NKG2a interaction regulate cytolytic activity of herpes simplex virus-specific memory CD8+ T cells in the latently infected trigeminal ganglia. J Immunol. 2006 Feb 1;176(3):1703-11. (**FJK-16s**, ICC)

Fontenot JD, Rasmussen JP, Williams LM, Dooley JL, Farr AG, Rudensky AY. Regulatory T cell lineage specification by the forkhead transcription factor foxp3. Immunity. 2005 Mar;22(3):329-41.

Hori S, Nomura T, Sakaguchi S. Control of regulatory T cell development by the transcription factor Foxp3. Science. 2003 Feb 14;299(5609):1057-61.

Related Products
00-4952 IHC/ICC Blocking Buffer - High Protein
00-4954 20X TBS Wash Buffer for IHC/ICC
00-4958 Fluoromount-G™
IH92-0081 Anti-Mouse CD8a eFluor®565NC (for IHC/ICC) (53-6.7)
IH95-0042 Anti-Mouse CD4 eFluor® 650NC (for IHC/ICC) (RM4-5)
IH95-0452 Anti-Human/Mouse CD45R (B220) eFluor® 650NC (for IHC/ICC) (RA3-6B2)

Legal
Under patent number: US 7,939,170 and additional pending patent application(s)