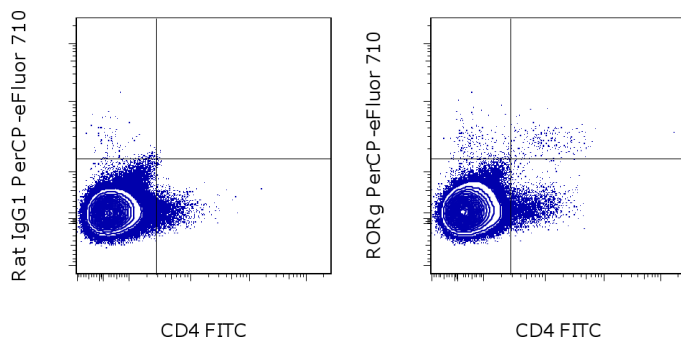


Anti-Mouse ROR gamma (t) PerCP-eFluor® 710

Catalog Number: 46-6981

Also known as: Retinoid-Related Orphan Receptor gamma

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57Bl/6 splenocytes with Anti-Mouse CD4 FITC (cat. 11-0041) and 0.125 ug of Rat IgG1 K Isotype Control PerCP-eFluor® 710 (cat. 46-4301) (left) or 0.125 ug of Anti-Mouse ROR gamma (t) PerCP-eFluor® 710 (right). Cells were also stained with Fixable Viability Dye eFluor® 780 (cat. 65-0865) and Anti-Mouse CD19 eFluor® 450 (cat. 48-0193) and Anti-Mouse CD3 APC (cat. 17-0031). Viable, CD3⁺ CD19⁻ cells were used for analysis.

Product Information

Contents: Anti-Mouse ROR gamma (t) PerCP-eFluor® 710

Catalog Number: 46-6981

Clone: B2D

Concentration: 0.2 mg/mL

Host/Isotype: Rat IgG1, 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.

Batch Code: Refer to vial

Use By: Refer to vial

Description

The B2D monoclonal antibody reacts with the mouse ROR gamma (t) protein. RORgamma is a member of the retinoic acid-related orphan receptor (ROR) family, which also includes ROR alpha and ROR beta. ROR family proteins are ligand-dependent transcription factors that play roles in multiple physiological processes. ROR gamma is expressed in several tissues including liver, lung, muscle, heart and kidney. Furthermore, it was discovered that alternative transcription results in the expression of an isoform, ROR gamma t, which is expressed exclusively in cells of the lymphoid compartment, namely CD4⁺CD8⁺ “double-positive” thymocytes, Th17 cells of the periphery and lymphoid tissue inducer (Lti) cells of lymphoid organs.

The ROR gamma t isoform differs from RORγ by three unique amino acids at the amino terminus. Therefore, the B2D antibody will react with both the ROR gamma and ROR gamma t isoforms.

Applications Reported

This B2D antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This B2D antibody has been tested by intracellular staining and flow cytometric analysis of mouse thymocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

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Click here or contact eBioscience Technical Support for more information on eFluor™ Organic Dyes including PerCP-eFluor® 710.

References

Sanos SL, Bui VL, Mortha A, Oberle K, Heners C, Johnner C, Diefenbach A. RORgamma and commensal microflora are required for the differentiation of mucosal interleukin 22-producing NKp46+ cells. *Nat Immunol.* 2009 Jan;10(1):83-91. (B2D, IF, IHC frozen, PubMed)

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He YW, Deftos ML, Ojala EW, Bevan MJ. RORgamma t, a novel isoform of an orphan receptor, negatively regulates Fas ligand expression and IL-2 production in T cells. *Immunity.* 1998 Dec;9(6):797-806.

Sun Z, Unutmaz D, Zou YR, Sunshine MJ, Pierani A, Brenner-Morton S, Mebius RE, Littman DR. Requirement for RORgamma in thymocyte survival and lymphoid organ development. *Science.* 2000 Jun 30;288(5475):2369-73.

Ivanov II, McKenzie BS, Zhou L, Tadokoro CE, Lepelley A, Lafaille JJ, Cua DJ, Littman DR. The orphan nuclear receptor RORgamma directs the differentiation program of proinflammatory IL-17+ T helper cells. *Cell.* 2006 Sep 22;126(6):1121-33.

Related Products

00-5523 Foxp3 / Transcription Factor Staining Buffer Set

17-0031 Anti-Mouse CD3e APC (145-2C11)

46-4301 Rat IgG1 K Isotype Control PerCP-eFluor® 710

48-0193 Anti-Mouse CD19 eFluor® 450 (eBio1D3 (1D3))

65-0865 Fixable Viability Dye eFluor® 780