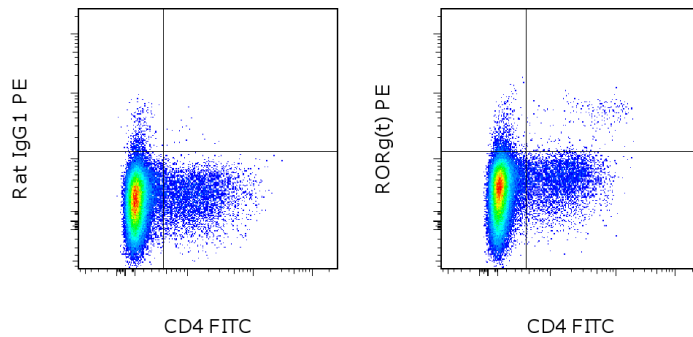


## Anti-Mouse ROR gamma (t) PE

**Catalog Number:** 12-6981

**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 PE (cat. 12-4301) (left) or 0.125 ug of Anti-Mouse ROR gamma (t) PE (right) using the Foxp3/Transcription Factor Buffer Set (cat. 00-5523). Cells were also stained with Fixable Viability Dye eFluor<sup>®</sup> 780 (cat. 65-0865) and Anti-Mouse CD19 eFluor<sup>®</sup> 450 (cat. 48-0191) and Anti-Mouse CD3 APC (cat. 17-0031). Viable, CD3- CD19- cells were used for analysis.

### Product Information



**Contents:** Anti-Mouse ROR gamma (t) PE

**Catalog Number:** 12-6981

**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

**Contains sodium azide**

### Description

The B2D monoclonal antibody reacts with the mouse ROR gamma (t) protein. ROR gamma 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 ROR gamma 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 using the Foxp3 Buffers (cat. 00-5523). 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Sanos SL, Bui VL, Mortha A, Oberle K, Heners C, Johner C, Diefenbach A. RORgammat 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)

Medvedev A, Yan ZH, Hirose T, Giguère V, Jetten AM. Cloning of a cDNA encoding the murine orphan receptor

Not for further distribution without written consent.

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RZR/ROR gamma and characterization of its response element. *Gene*. 1996 Nov 28; 181(1-2):199-206.

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 RORgammat 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

12-4301 Rat IgG1 K Isotype Control PE

65-0865 Fixable Viability Dye eFluor® 780