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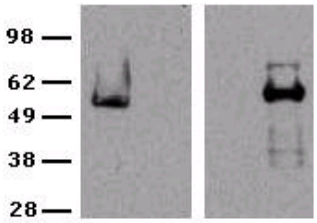
Anti-Mouse ROR gamma (t) Purified

Catalog Number: 14-6981
Also Known As:RORgamma, RORg, RORg(t), Retinoid-Related Orphan Receptor gamma
RUO: For Research Use Only



Left: Mouse thymus (left) and spleen (right) nuclear cell lysates were loaded at 1x10^5 cells/lane, probed with 2 µg/mL of Anti-Mouse RORγ (t) Purified and revealed with Anti-Rat IgG HRP.
Right: Untransfected (left) and mouse RORγ-transfected (right) 293T nuclear cell lysates were loaded at 1X10^5 cells/lane, probed with 2 µg/ml of Anti-Mouse RORγ (t) Purified and revealed with HRP anti-rat IgG.

Note: RORγ runs at a slightly higher molecular weight in the transfected cell lysate, compared to the thymus lysate, due to the addition of a tag to full length RORγ in the transfected cells.

Product Information

Contents: Anti-Mouse ROR gamma (t) Purified
REF Catalog Number: 14-6981
Clone: B2D
Concentration: 0.5 mg/ml
Host/Isotype: Rat IgG1, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The B2D monoclonal antibody reacts with the mouse RORγ(t) protein. RORγ is a member of the retinoic acid-related orphan receptor (ROR) family, which also includes RORα and RORβ. ROR family proteins are ligand-dependent transcription factors that play roles in multiple physiological processes. RORγ 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, RORγt, which is expressed exclusively in cells of the lymphoid compartment, namely CD4+CD8+ “double-positive” thymoctes, Th17 cells of the periphery and lymphoid tissue inducer (Lti) cells of lymphoid organs.

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

Applications Reported

This B2D antibody has been reported for use in immunoblotting (WB).

Applications Tested

This B2D antibody has been tested by western blot analysis of mouse thymus nuclear lysates. This B2D antibody can be used at a starting concentration of 2 ug/ml, however the optimal concentration should be determined for individual experimental conditions.

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 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
12-6988 Anti-Human/Mouse ROR gamma (t) PE (AFKJS-9)
13-4813 Anti-Rat IgG Biotin (Polyclonal)
14-4301 Rat IgG1 K Isotype Control Purified

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