

ROR gamma (t) Monoclonal Antibody (B2D), Alexa Fluor™ 488, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Alexa Fluor™ 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	B2D
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2811877

Applications	Tested Dilution	Publications
Western Blot (WB)	-	2 Publications
Flow Cytometry (Flow)	1.0 µg/test	3 Publications

Product Specific Information

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.

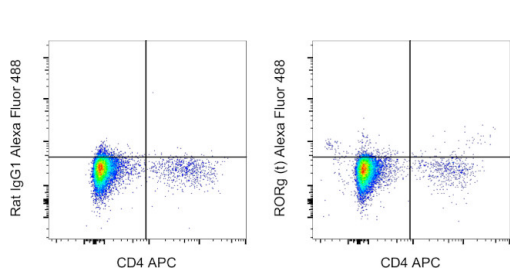
Applications Reported: This B2D antibody has been reported for use in flow cytometric analysis.

Applications Tested: This B2D antibody has been tested by flow cytometric analysis of mouse splenocytes using the Foxp3 /Transcription Factor Staining Buffer Set (Product # 00-5523-00) and protocol. Please refer to "Staining Intracellular Antigens for Flow Cytometry, Protocol B: One step protocol for intracellular (nuclear) proteins" located at www.thermofisher.com/flowprotocols. This may be used at less than or equal to 1.0 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.

Excitation: 488 nm; Emission: 519 nm; Laser: Blue Laser.

Product Images For ROR gamma (t) Monoclonal Antibody (B2D), Alexa Fluor™ 488, eBioscience™



ROR gamma (t) Antibody (53-6981-82) in Flow
C57BL/6 mouse splenocytes were surface stained with CD3 Monoclonal Antibody, eFluor 450 (Product # 48-0031-82), CD4 Monoclonal Antibody, APC (Product # 17-0042-82), and CD19 Monoclonal Antibody, eFluor® 450 (Product #48-0193-80), followed by intracellular staining with 0.5 µg of Rat IgG1 kappa Isotype Control, Alexa Fluor 488 (Product # 53-4301-80) (left) or 0.5 µg of ROR gamma (t) Monoclonal Antibody, Alexa Fluor 488 (right), using the Foxp3 /Transcription Factor Staining Buffer Set (Product # 00-5523-00) and protocol. Viable, CD3-, CD19- cells were used for analysis, as determined by Fixable Viability Dye eFluor 450 (Product # 65-0863-18).

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Western Blot (2)

<p>Clinical, cosmetic and investigational dermatology</p> <p>Gallic Acid Ameliorates Atopic Dermatitis-Like Skin Inflammation Through Immune Regulation in a Mouse Model.</p> <p>"Published figure using ROR gamma (t) monoclonal antibody (Product # 53-6981-82) in Western Blot"</p> <p>Authors: Hu G,Zhou X</p>	<p>Year</p> <p>2022</p>
<p>Molecular brain</p> <p>Interleukin-17 induced by cumulative mild stress promoted depression-like behaviors in young adult mice.</p> <p>"Published figure using ROR gamma (t) monoclonal antibody (Product # 53-6981-82) in Western Blot"</p> <p>Authors: Kim J,Suh YH,Chang KA</p>	<p>Year</p> <p>2021</p>

Flow Cytometry (3)

<p>Immunity, inflammation and disease</p> <p>NCR negative group 3 innate lymphoid cell (NCR⁻ ILC3) participates in abnormal pathology of lung in cigarette smoking-induced COPD mice.</p> <p>"53-6981-82 was used in Flow cytometry/Cell sorting to investigate the role of Natural Cytotoxicity Receptor negative innate lymphoid cells (NCR- ILC3) in the pathogenesis of chronic obstructive pulmonary disease (COPD) induced by cigarette smoking."</p> <p>Authors: Chu S,Ma L,Yang X,Xiao B,Liang Y,Zheng S,Li L</p>	<p>Year</p> <p>2023</p> <p>Species</p> <p>Mouse</p>
<p>International journal of immunopathology and pharmacology</p> <p>Identification of heterogeneous subsets of aortic interleukin-17A-expressing CD4⁺ T cells in atherosclerotic mice.</p> <p>"53-6981-82 was used in Flow cytometry/Cell sorting to show that, compared with Th17 cells, Th17.1 cells plus transitional Th17.1 cells induced higher expression of C-X-C motif chemokine ligand 1 (CXCL1), C-C motif chemokine ligand 2 (CCL2), C-X-C motif chemokine 5 (CXCL5), and granulocyte-macrophage colony-stimulating factor (GM-CSF) in aortic endothelial cells."</p> <p>Authors: Lin G,Zhang L,Yan Z,Jiang W,Wu B,Li D,Xiong X</p>	<p>Year</p> <p>2022</p> <p>Species</p> <p>Mouse</p>

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