ROR gamma (t) Monoclonal Antibody (AFKJS-9), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rhesus monkey
Published Species	Pig, Mouse, Human, Rhesus monkey
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	AFKJS-9
Conjugate	PE
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1834470

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	80 Publications

Product Specific Information

Description: The AFKJS-9 monoclonal antibody reacts with the mouse, human and rhesus monkey 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 its amino terminus. Therefore, the AFKJS-9 antibody will react with both the ROR gamma and ROR gamma (t) isoforms.

Applications Reported: This AFKJS-9 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

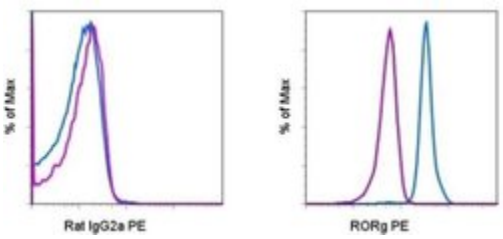
Applications Tested: This AFKJS-9 antibody has been tested by intracellular staining followed by flow cytometric analysis of mouse thymocytes and Th17-polarized splenocytes using the Foxp3/Transcription Factor Staining Buffer Set (cat. 00-5523-00) and

protocol. Please refer to Best Protocols: Protocol B: One step protocol for (nuclear) intracellular proteins located under the Resources Tab online. This can be used at less than or equal to 0.5 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For ROR gamma (t) Monoclonal Antibody (AFKJS-9), PE, eBioscience™



ROR gamma (t) Antibody (12-6988-82) in Flow
Surface staining of mouse thymocytes with Anti-Mouse CD4 FITC (Product # 11-0041-82) and Anti-Mouse CD8a APC (Product # 17-0081-82), followed by intracellular staining with 0.25 µg of Rat IgG2a K Isotype Control PE (Product # 12-4321-80) (left) or 0.25 µg of Anti-Human/Mouse ROR gamma (t) PE (right) using the Foxp3/Transcription Factor Staining Buffer Set (Product # 00-5523-00) and protocol. The histograms demonstrate staining of CD4+CD8+ double-positive cells (blue histogram) or CD4+CD8- single-positive cells (purple histogram).

83 References

Immunohistochemistry (1)

The Journal of neuroscience : the official journal of the Society for Neuroscience

Actin-Binding Protein Cortactin Promotes Pathogenesis of Experimental Autoimmune Encephalomyelitis by Supporting Leukocyte Infiltration into the Central Nervous System.

"12-6988-82 was used in Immunohistochemistry to study the role of cortactin in experimental autoimmune encephalomyelitis through the use of cortactin gene-inactivated male and female mice."

Authors: Samus M,Li YT,Sorokin L,Rottner K,Vestweber D

Species
Mouse

Dilution
Not Cited

Year
2020

Immunohistochemistry (Frozen) (2)

PloS one

Central Role of Core Binding Factor 2 in Mucosa-Associated Lymphoid Tissue Organogenesis in Mouse.

"12-6988 was used in Immunohistochemistry to demonstrate that Cbf2 is a central regulator of the mucosa-associated lymphoid tissue developmental program."

Authors: Nagatake T,Fukuyama S,Sato S,Okura H,Tachibana M,Taniuchi I,Ito K,Shimojou M,Matsumoto N,Suzuki H,Kunisawa J,Kiyono H

Species
Mouse

Dilution
Not Cited

Year
2016

eLife

ILC3 GM-CSF production and mobilisation orchestrate acute intestinal inflammation.

"12-6988 was used in Immunofluorescence on frozen tissues to investigate how a small population of innate lymphoid cells (ILCs) has large effects on immune homeostasis, showing that ILC3s produce GM-CSF to orchestrate acute intestinal inflammation."

Authors: Pearson C,Thornton EE,McKenzie B,Schaupp AL,Huskens N,Griseri T,West N,Tung S,Seddon BP,Uhlig HH,Powrie F

Species
Mouse

Dilution
Not Cited

Year
2016

Flow Cytometry (80)

Nature communications

Mitochondrial transcription factor A in RORt^{+} lymphocytes regulate small intestine homeostasis and metabolism.

"12-6988-82 was used in Flow Cytometry to show that IL-22, a cytokine produced by RORt+ lymphocytes inhibits IL-13-induced tuft cell differentiation in vitro, and suppresses the tuft cell-type 2 immune circuit and small intestine lengthening in vivo, highlighting its key role in gut tissue remodeling."

Authors: Fu Z,Dean JW,Xiong L,Dougherty MW,Oliff KN,Chen ZE,Jobin C,Garrett TJ,Zhou L

Species
Mouse

Dilution
Not Cited

Year
2021

View more Flow references on thermofisher.com

More applications with references on thermofisher.com