

CD304 (Neuropilin-1) Monoclonal Antibody (3DS304M), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	3DS304M
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 nm
Form	Liquid
Concentration	0.2 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_2573741

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 µg/test	3 Publications

Product Specific Information

Description: The monoclonal antibody 3DS304M recognizes mouse CD304 (Neuropilin-1), a type 1 transmembrane glycoprotein present on the surface of multiple cell types, including: regulatory T cells (Treg), NKT cells, DC, certain types of stem cells, neurons, endothelial cells, and some neoplastic cells. Neuropilin-1, in complex with plexins, serves as a co-receptor for type 3 semaphorins in growing neurons. It is also involved in the process of angiogenesis being a part of a functional receptor for VEGF in endothelial cells. In mice, Neuropilin-1 is expressed on thymus-derived natural Treg but not peripherally induced Treg. In addition, transient expression on recently activated non-regulatory T cells has been observed. Neuropilin-1 has been used as a marker of recent thymic emigrants in the mouse iNKT cell population. It has been shown that Neuropilin-1 forms a complex with TGF beta receptors, activating the latent form of TGF beta (LAP-TGF beta 1) and augmenting canonical Smad2/3 signaling.

This 3DS304M antibody will recognize formaldehyde-fixed as well as methanol-treated epitopes.

Applications Reported: This 3DS304M antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 3DS304M antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.06 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.

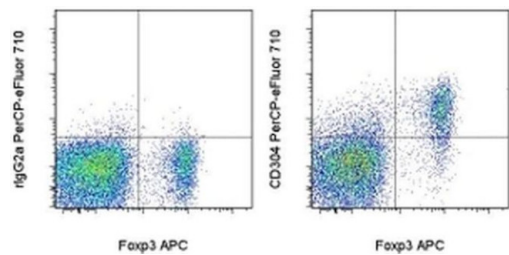
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD304 (Neuropilin-1) Monoclonal Antibody (3DS304M), PerCP-eFluor™ 710, eBioscience™



CD304 (Neuropilin-1) Antibody (46-3041-82) in Flow
Surface staining of BALB/c splenocytes with Anti-Mouse CD4 eFluor® 450 (Product # 48-0042-82) and 0.03 µg of Rat IgG2a K Isotype Control PerCP-eFluor® 710 (Product # 46-4321-82) (left) or 0.03 µg of Anti-Mouse CD304 (Neuropilin-1) PerCP-eFluor® 710 (right), followed by intracellular staining with Anti-Mouse/Rat Foxp3 APC (Product # 17-5773-82) using the Foxp3 /Transcription Factor Staining Buffer Set (Product # 00-5523-00) and protocol. CD4+ lymphocytes were used for analysis.

3 References

Flow Cytometry (3)

<p>Cancer gene therapy</p> <p>Intratumoral DNA-based delivery of checkpoint-inhibiting antibodies and interleukin 12 triggers T cell infiltration and anti-tumor response.</p> <p>"46-3041-82 was used in Flow cytometry/Cell sorting to evaluate the simultaneous delivery of the cytokine and checkpoint-inhibiting antibodies by intratumoral DNA electroporation in mice."</p> <p>Authors: Jacobs L, Yshii L, Junius S, Geukens N, Liston A, Hollevoet K, Declerck P</p>	<p>Year 2022</p> <p>Species Mouse</p>
<p>Cell reports</p> <p>Brown adipose tissue involution associated with progressive restriction in progenitor competence.</p> <p>"Published figure using CD304 (Neuropilin-1) monoclonal antibody (Product # 46-3041-82) in Flow Cytometry"</p> <p>Authors: Huang Z, Zhang Z, Moazzami Z, Heck R, Hu P, Nanda H, Ren K, Sun Z, Bartolomucci A, Gao Y, Chung D, Zhu W, Shen S, Ruan HB</p>	<p>Year 2022</p>

View more Flow references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.