

CD271 (NGF Receptor) Monoclonal Antibody (ME20.4), Super Bright™ 600, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Dog, Human, Mouse, Non-human primate, Sheep, Pig, Rabbit, Rat
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	ME20.4
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2762622

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	2 Publications

Product Specific Information

Description: The monoclonal antibody ME20.4 recognizes CD271, a 75 kDa, type I transmembrane protein that belongs to the low-affinity neurotrophin receptor and tumor necrosis factor receptor superfamily. CD271 is expressed by neurons, Schwann cells, melanocytes, mesenchymal stem/stromal cells, neural crest stem cells, astrocytes, oligodendrocytes, and a subset of lymphoid cells including follicular dendritic cells. CD271 binds to the ligands NGF, BDNF, NTF3, and NTF4. CD271 contains a death domain which induces apoptosis and regulates cell growth and proliferation through interactions with TRAF2, TRAF4, TRAF6, PTPN13, and RANBP9.

The ME20.4 monoclonal antibody recognizes human, non-human primate, mouse, rat, sheep, rabbit, cat, dog, and pig CD271.

Applications Reported: This ME20.4 antibody has been reported for use in flow cytometric analysis, western blotting, and microscopy.

Applications Tested: This ME20.4 antibody has been pre-titrated and tested by flow cytometric analysis of stimulated HEK-293T cells. This can be used at 5 µL (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 10⁵ to 10⁸ cells/test.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

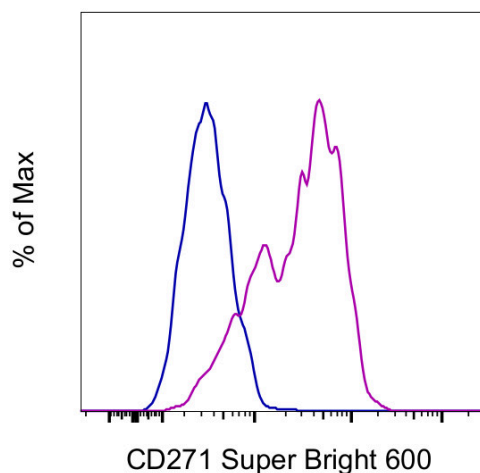
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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: 405 nm; Emission: 600 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD271 (NGF Receptor) Monoclonal Antibody (ME20.4), Super Bright™ 600, eBioscience™



CD271 (NGF Receptor) Antibody (63-9400-42) in Flow

Staining of 2-day Ibuprofen-stimulated HEK-293T cells with Mouse IgG1 kappa Isotype Control, Super Bright 600 (Product # 63-4714-82) (blue histogram) or CD271 (NGF Receptor) Super Bright 600 (purple histogram). Total viable cells were used for analysis, as determined by Fixable Viability Dye eFluor 780 (Product # 65-0865-18).

Immunohistochemistry (1)

Stem cell research & therapy

Synovial membrane-derived mesenchymal progenitor cells from osteoarthritic joints in dogs possess lower chondrogenic-, and higher osteogenic capacity compared to normal joints.

"Published figure using CD271 (NGF Receptor) monoclonal antibody (Product # 63-9400-42) in Immunohistochemistry"

Authors: Teunissen M,Ahrens NS,Snel L,Narcisi R,Kamali SA,van Osch GJVM,Meij BP,Mastbergen SC,Sivasubramaniyan K,Tryfonidou MA

Year
2022

Flow Cytometry (2)

Nature communications

In mouse chronic pancreatitis CD25⁺FOXP3⁺ regulatory T cells control pancreatic fibrosis by suppression of the type 2 immune response.

"Published figure using CD271 (NGF Receptor) monoclonal antibody (Product # 63-9400-42) in Flow Cytometry"

Authors: Glaubit J,Wilden A,Golchert J,Homuth G,Völker U,Bröker BM,Thiele T,Lerch MM,Mayerle J,Aghdassi AA,Weiss FU,Sendler M

Year
2022

The Journal of experimental medicine

Stage-specific action of Runx1 and GATA3 controls silencing of PU.1 expression in mouse pro-T cells.

"Published figure using CD271 (NGF Receptor) monoclonal antibody (Product # 63-9400-42) in Flow Cytometry"

Authors: Hosokawa H,Koizumi M,Masuhara K,Romero-Wolf M,Tanaka T,Nakayama T,Rothenberg EV

Year
2021

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.