

CD271 (NGF Receptor) Monoclonal Antibody (ME20.4), Super Bright™ 436, 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™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	ME20.4
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 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_2762621

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.

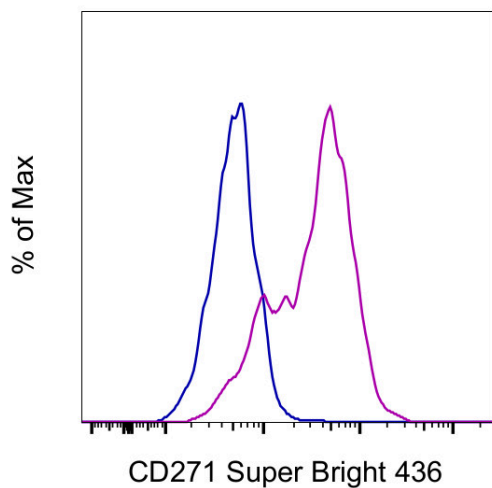
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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.

Excitation: 405 nm; Emission: 436 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™ 436, eBioscience™



CD271 (NGF Receptor) Antibody (62-9400-42) in Flow

Staining of 2-day Ibuprofen-stimulated HEK-293T cells with Mouse IgG1 kappa Isotype Control, Super Bright 436 (Product # 62-4714-82) (blue histogram) or CD271 (NGF Receptor) Super Bright 436 (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 # 62-9400-42) 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 # 62-9400-42) in Flow Cytometry"

Authors: Glaubitz 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 # 62-9400-42) in Flow Cytometry"

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

Year
2021

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