iNOS Monoclonal Antibody (CXNFT), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	CXNFT
Conjugate	PE
Excitation/Emission Max	565/576 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_2572642

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 µg/test	29 Publications

Product Specific Information

Description: This CXNFT monoclonal antibody reacts to mouse NOS2 (inducible NOS, iNOS). Nitric oxide synthase enzymes catalyze the formation of nitric oxide from L-arginine through an NADPH- and oxygen-dependent mechanism. There are three isoforms of NOS that are encoded by three separate genes. NOS1 (neuronal NOS, nNOS) and NOS3 (endothelial NOS, eNOS) are constitutively expressed, while NOS2 is induced in response to bacterial endotoxins and inflammatory cytokines such as IFN gamma and TNF alpha. NOS2 is expressed by myeloid-derived suppressor cells and M1 macrophages but not alternatively activated M2 macrophages. NOS enzymes are functionally active only when they form homodimers, and dimerization of NOS2 occurs at steady-state concentrations of free Ca2+ such that NOS2 is functionally active when it is produced.

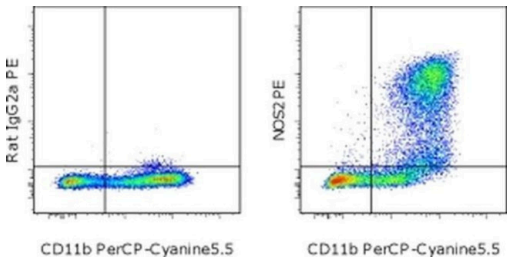
Applications Reported: This CXNFT antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This CXNFT antibody has been tested by intracellular staining and flow cytometric analysis of LPS-stimulated mouse thioglycolate-elicited peritoneal exudate cells using the intracellular Fixation and Permeabilization Buffer Set (Product # 88-8824-00) and protocol. The Foxp3/Transcription Factor Staining Buffer Set (Product # 00-5523-00) may also be used with similar results. 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 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 iNOS Monoclonal Antibody (CXNFT), PE, eBioscience™



iNOS Antibody (12-5920-82) in Flow
Mouse thioglycolate-elicited peritoneal exudate cells were stimulated overnight with LPS then surface stained with Anti-Mouse CD11b PerCP-Cyanine5-5 (Product # 45-0112-82) followed by fixation and permeabilization with the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00). The cells were then intracellularly stained with 0.03 µg of Rat IgG2a K Isotype Control PE (Product # 12-4321-80) (left) or 0.03 µg of Anti-Mouse NOS2 PE (right). Total viable cells, as determined by Fixable Viability Dye eFluor® 450 (Product # 65-0863-14), were used for analysis.

29 References

Flow Cytometry (29)

Frontiers in bioengineering and biotechnology

Advanced phosphocreatine-grafted chitosan hydrogel promote wound healing by macrophage modulation.

"12-5920-82 was used in Flow cytometry/Cell sorting to create a water-soluble phosphocreatine-grafted methacryloyl chitosan (CSMP) hydrogel that, when applied to wounds, promoted tissue repair by modulating macrophage behavior, reducing inflammation, and enhancing wound healing through the NF-B signaling pathway."

Authors: Sheng W,Qin H,Wang T,Zhao J,Fang C,Zhang P,Liu P,Udduttula A,Zeng H,Chen Y

Year
2023

Species
Mouse

Chinese medical journal

Local and systemic inflammation triggers different outcomes of tumor growth related to infiltration of anti-tumor or pro-tumor macrophages.

"12-5920-82 was used in Flow cytometry/Cell sorting to suggest that the different outcomes of tumor growth might be attributed to the infiltration of anti-tumor or pro-tumor immune cells, especially M1 or M2 type macrophages into tumor microenvironment."

Authors: Liu X,Jiang Q,Shen S,Hou Y

Year
2022

Species
Mouse

View more Flow references on thermofisher.cn

More applications with references on thermofisher.cn