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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-iNOS/NOS2 Antibody (Monoclonal, 31N04)

Catalog Number: M00368-4

About NOS2

Nitric oxide synthase, inducible is an enzyme that in humans is encoded by the NOS2 gene. Nitric oxide (NO) is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter; it is implicated in neurotoxicity associated with stroke and neurodegenerative diseases, neural regulation of smooth muscle, including peristalsis, and penile erection. Three different NOS isoforms have been identified which fall into two distinct types, constitutive and inducible. The inducible NOS (iNOS) isoform is expressed in a variety of cell types and tissues in response to inflammatory agents and cytokines. The human iNOS (NOS2) gene is approximately 37 kb in length and consists of 26 exons and 25 introns. NOS2-derived NO is a prerequisite for cytokine signaling and function in innate immunity.

Overview

Product Name	Anti-iNOS/NOS2 Antibody (Monoclonal, 31N04)
Reactive Species	Human, Mouse
Description	Boster Bio Anti-iNOS/NOS2 Antibody (Monoclonal, 31N04) catalog # M00368-4. Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse.
Application	IF, IHC, ICC, WB
Clonality	Monoclonal 31N04
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P35228

Technical Details

Immunogen	Synthetic peptide.
Form	Liquid
Concentration	500 ug/ml
Purification	Protein A affinity purified.

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Suggested Dilutions	Western blot, 1:500-2000 Immunohistochemistry, 1:50-200 Immunocytochemistry/Immunofluorescence, 1:50-200

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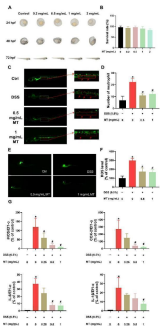
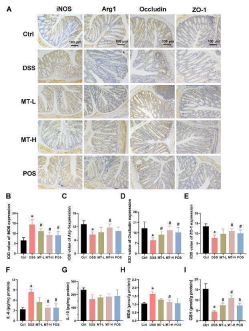
Anti-iNOS/NOS2 Antibody (Monoclonal, 31N04) (M00368-4) Images



Effects of MT water extract on DSS-induced UC in zebrafishes. (A) Nontoxic effect of MT water extract (0.2–2 mg/mL) on the development of zebrafishes after 24, 48, and 72 hpf under photomicrograph. (B) Survival rate of zebrafishes. After 72 hpf, zebrafishes were treated with or without 0.5% DSS and co-treated with different concentrations of MT (0.2–2 mg/mL) for 3 days. (C and D) Effects of MT water extract (0.5–1 mg/mL) on the recruitment of neutrophils in DSS-induced IBD in zebrafish larvae. (C) Representative fluorescent images of different groups. Neutrophils recruited in the intestine were highlighted in the white area and zoomed for quantitative analysis (red rectangle). Scale bar: 250 μm. (D) Quantitative analysis of the number of neutrophils recruited in intestine. (E and F) Effects of MT water extract (0.5–1 mg/mL) on DSS-induced ROS production in WT zebrafish larvae. (F) Representative fluorescent images of ROS in different groups stained by CM-H2DCFDA. (F) Quantitative analysis of ROS levels in each group. (G) Effects of MT water extract (0.25–1 mg/mL) on DSS-induced inflammatory gene expressions (iNOS, COX-2, IL-6, and IL-1beta) in zebrafish. Data were expressed as mean ± SD from at least three independent trials. One-way ANOVA followed by Tukey's multiple comparison test was performed to compare the differences between groups. *p < 0.05 versus control and #p < 0.05 versus DSS alone group. COX-2, cyclooxygenase-2; DSS, dextran sulfate sodium; ef1alpha, elongation factor 1alpha; IL, interleukin; iNOS, inducible nitric oxide synthase; ROS, reactive oxygen species.Index in Food Frontiers under a CC BY license. DOI: 10.1002/fft2.70164



Effects of MT water extract on regulating macrophage polarization, maintaining intestinal barrier integrity, and alleviating oxidative stress in the colons of DSS-induced UC mice. (A) IHC staining of iNOS, Arg1, occludin, and ZO-1 expressions in mouse colon tissues. Quantitative analysis of the integrated optical density (IOD) of (B) iNOS, (C) Arg1, (D) occludin, and (E) ZO-1 in each group. The levels of (F) IL-6, (G) IL-10, (H) MDA, and (I) GSH were measured and analyzed. Data were presented as means ± SD for three independent trials. One-way ANOVA followed by Tukey's multiple comparison test was performed to compare the differences between groups. *p < 0.05 versus control and #p < 0.05 versus DSS alone group. Arg1, arginase 1; DSS, dextran sulfate sodium; IL, interleukin; iNOS, inducible nitric oxide synthase; MDA, malondialdehyde; MT, Medulla Tetrapanacis.Index in Food Frontiers under a CC BY license. DOI: 10.1002/fft2.70164

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reviews help your fellow scientists make the right decisions. Thank you for your contribution.

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For Research Use Only. Not for use in diagnostic procedures.