

PE anti-Nos2 (iNOS)

Catalog # / Size: 4084030 / 100 µg
4084025 / 25 µg

Clone: W16030C

Isotype: Rat IgG2b, κ

Immunogen: Partial mouse NOS2 recombinant protein (1-250 a.a.) expressed in *E. coli*.

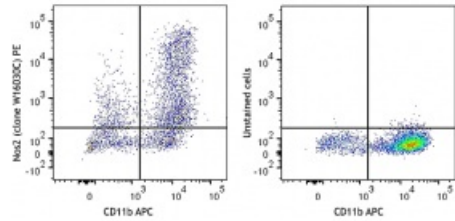
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Workshop Number: V-CD28.05

Concentration: 0.2 mg/mL



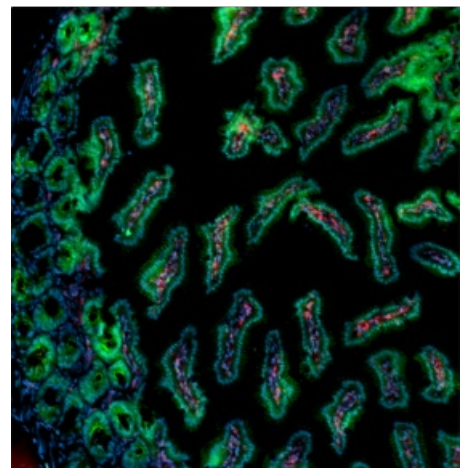
Thioglycolate-elicited Balb/c mouse peritoneal macrophages were incubated overnight with (left) and without (right) LPS. Cells were then surface stained with CD11b APC before being fixed with Fixation Buffer and permeabilized with Intracellular Staining Permeabilization Wash Buffer. Finally cells were stained with anti-Nos2 (iNOS) (clone W16030C) PE.

Applications:

Applications: Intracellular Staining for Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.125 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Mouse NOS2 has two isoforms: Isoform A is 130 kD and isoform B is 118 kD. This clone recognizes isoform B better than A in the tested cell.



C57BL/6 mouse frozen intestine section was fixed with 4% paraformaldehyde (PFA) for 10 minutes at room temperature and blocked with 5% FBS for 30 minutes at room temperature. Then the section was stained with 10 µg/mL of anti-mouse CD45 (clone S18009D) Alexa Fluor® 647 (red) and anti-mouse/human CD324 (clone DECMA-1) Alexa Fluor® 594 (green) overnight at 4°C. Nuclei were counterstained with DAPI (blue). The image was captured by 10X objective.

**Application
References:**

1. Verjan Garcia N, *et al.* 2011. *J. Immunol.* 187:2268. (WB, IF)
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Description: Nitric Oxide Synthase 2 (NOS2), also known as inducible NOS (iNOS), contains an N-terminal oxygenase domain and a C-terminal reductase domain, and functions to catalyze the formation of nitric oxide (NO) from L-arginine. NO is a reactive free radical which acts as a biologic messenger with diverse functions throughout the body, such as neurotransmission, antimicrobial, and antitumor activity. NOS2 is involved in inflammatory responses and enhances the synthesis of PGE2 and proinflammatory cytokines such as IL-6 and IL-8. The NOS2 gene is highly expressed in liver and is inducible by a combination of bacterial endotoxins and certain cytokines, including IL-1, IFN γ and TNF α . NOS2 also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such as COX2.

- Antigen
References:**
1. Salim T, *et al.* 2016. *PLoS One.* 11:e0153289.
 2. Ma Z, *et al.* 2016. *Inflammation.* 39:543.
 3. Lee SH, *et al.* 2016. *J. Cell. Biochem.* 117:978.
 4. Landes MB, *et al.* 2015. *J. Leuko. Biol.* 97:1111.
 5. Karpuzoglu E, *et al.* 2006. *Nitric. Oxide* 15:177.
 6. Suschek CV, *et al.* 2004. *Curr. Mol. Med.* 4:763.