

# iNOS Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse
Published Species	Rat, Sheep, Cat, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues C K(1131) K G S A L E E P K A T R L(1144) of mouse macrophage NOS.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	PBS, whole serum
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2152737

Applications	Tested Dilution	Publications
Western Blot (WB)	1:2,000	25 Publications
Immunohistochemistry (IHC)	-	34 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:200	12 Publications
Immunohistochemistry (Frozen) (IHC (F))	1:500	2 Publications
Immunocytochemistry (ICC/IF)	1:250	5 Publications
Flow Cytometry (Flow)	-	2 Publications

## Product Specific Information

PA3-030A detects inducible nitric oxide synthase (iNOS) from human and mouse tissues. This antibody does not detect endothelial NOS (eNOS) or brain NOS (bNOS).

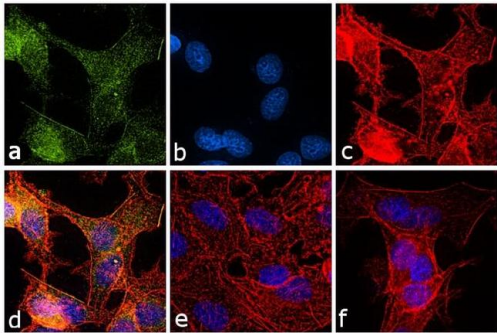
PA3-030A has been successfully used in Western blot and immunohistochemistry (paraffin and frozen) procedures. By Western blot, this antibody detects an ~130 kDa protein representing iNOS in induced RAW 264.7 cell extracts.

The PA3-030A immunogen is a synthetic peptide corresponding to residues C K(1131) K G S A L E E P K A T R L(1144) of mouse macrophage NOS.

PA3-030A can be used with blocking peptide PEP-008.

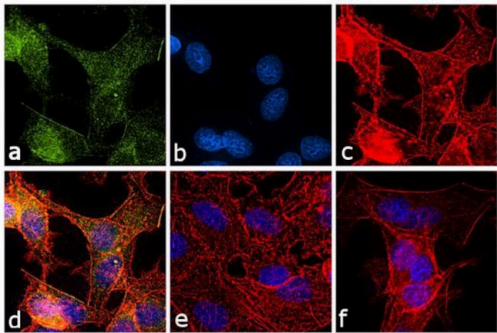
Antibodies to this protein (and modification) were previously sold as part of a Thermo Scientific Cellomics High Content Screening Kit. This replacement antibody is now recommended for researchers who need an antibody for high content cell based assays. It has been thoroughly tested and validated for cellular immunofluorescence (IF) applications. Further optimization including the selection of the most appropriate fluorescent Dylight conjugated secondary antibody may have to be performed for your high content assay.

Product Images For iNOS Polyclonal Antibody



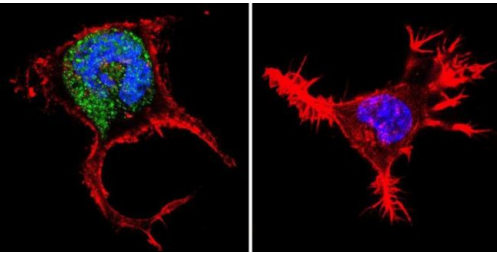
**iNOS Antibody (PA3-030A)**

Detection of altered subcellular localization of the target protein by cell treatment demonstrates antibody specificity. Immunofluorescence analysis of iNOS using iNOS Polyclonal Antibody (Product # PA3-030A), shows localization of iNOS in both cytoplasm and nucleus of A549 cells upon treatment with TNF-alpha, IFN-gamma and Interleukin-1 beta. {TM}



**iNOS Antibody (PA3-030A) in ICC/IF**

Immunofluorescence analysis of iNOS was performed using 70% confluent log phase A549 cells treated with a combination of TNF- (5 ng/mL), IFN (50 U/mL) and IL-1 (50 U/mL) for 18 h. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with iNOS Rabbit Polyclonal Antibody (Product # PA3-030A) at 1:250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic and nuclear localization. Panel e shows the untreated cells with no signal. Panel f represents the no primary control. The images were captured at 60X magnification.



**iNOS Antibody (PA3-030A) in ICC/IF**

Immunofluorescent analysis of iNOS using Anti-iNOS Polyclonal Antibody (Product # PA3-030A) shows staining in Neuro-2a Cells. iNOS staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing iNOS (Product # PA3-030A) at a dilution of 1:200 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35552, Goat Anti-Rabbit). Images were taken at 60X magnification.

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Western Blot (25)

<p>Bioactive materials</p> <p><b>Biodegradable magnesium materials regulate ROS-RNS balance in pro-inflammatory macrophage environment.</b></p> <p>"Published figure using iNOS polyclonal antibody (Product # PA3-030A) in Western Blot"</p> <p>Authors: Kwesiga MP,Gillette AA,Razaviamri F,Plank ME,Canull AL,Alesch Z,He W,Lee BP,Guillory RJ</p>	<p>Year</p> <p>2023</p>
<p>Nature communications</p> <p><b>Adipocyte-derived lactate is a signalling metabolite that potentiates adipose macrophage inflammation via targeting PHD2.</b></p> <p>"Published figure using iNOS polyclonal antibody (Product # PA3-030A) in Western Blot"</p> <p>Authors: Feng T,Zhao X,Gu P,Yang W,Wang C,Guo Q,Long Q,Liu Q,Cheng Y,Li J,Cheung CKY,Wu D,Kong X,Xu Y,Ye D,Hua S,Loomes K,Xu A,Hui X</p>	<p>Year</p> <p>2022</p>
<p>View more WB references on thermofisher.com</p>	

Immunohistochemistry (34)

<p>Nature communications</p> <p><b>Adipocyte-derived lactate is a signalling metabolite that potentiates adipose macrophage inflammation via targeting PHD2.</b></p> <p>"Published figure using iNOS polyclonal antibody (Product # PA3-030A) in Western Blot"</p> <p>Authors: Feng T,Zhao X,Gu P,Yang W,Wang C,Guo Q,Long Q,Liu Q,Cheng Y,Li J,Cheung CKY,Wu D,Kong X,Xu Y,Ye D,Hua S,Loomes K,Xu A,Hui X</p>	<p>Year</p> <p>2022</p>
<p>Nature communications</p> <p><b>Dual functions of microRNA-17 in maintaining cartilage homeostasis and protection against osteoarthritis.</b></p> <p>"Published figure using iNOS polyclonal antibody (Product # PA3-030A) in Immunohistochemistry"</p> <p>Authors: Zhang Y,Li S,Jin P,Shang T,Sun R,Lu L,Guo K,Liu J,Tong Y,Wang J,Liu S,Wang C,Kang Y,Zhu W,Wang Q,Zhang X,Yin F,Sun YE,Cui L</p>	<p>Year</p> <p>2022</p>
<p>View more IHC references on thermofisher.com</p>	

More applications with references on thermofisher.com

- IHC (P) (12)
- IHC (F) (2)
- ICC/IF (5)
- Flow (2)

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