

# iNOS Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse
Published Species	Rat, Sheep, Cat, Mouse, Human
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	whole serum diluted in PBS
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	13 Publications
Immunohistochemistry (IHC)	-	25 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:200	11 Publications
Immunohistochemistry (Frozen) (IHC (F))	1:500	1 Publication
Immunocytochemistry (ICC/IF)	1:250	3 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

## 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.

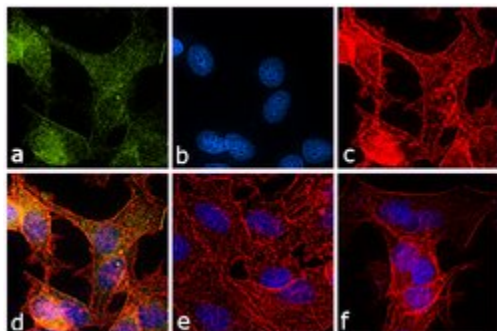
The PA3-030A immunogen is a synthetic peptide corresponding to residues C K(1131) K G S A L E E P K A T R L(1144) of mouse macrophage NOS.

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.

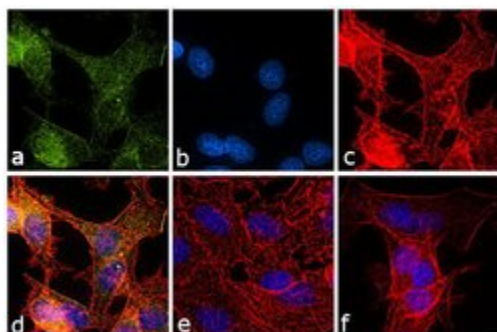
## Advanced Verification Data



### iNOS Antibody (PA3-030A)

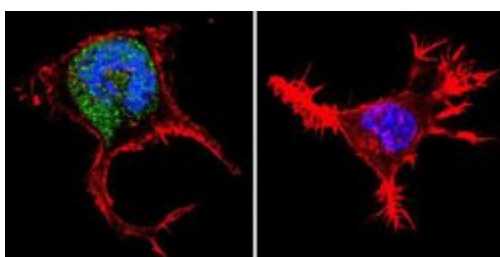
Detection of altered subcellular localization of the target protein by cell treatment demonstrates antibody specificity. Immunofluorescence analysis of iNOS using iNOS Polyclonal Antibody (Product # PA3-030A), shows localization of iNOS in both cytoplasm and nucleus of A549 cells upon treatment with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

## Product Images For iNOS Polyclonal Antibody



### 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 (H+L) 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.

View more figures on [thermofisher.com](http://thermofisher.com)

## Western Blot (13)

Journal of agricultural and food chemistry

### Evaluation of antioxidant activity and inhibitory effect on nitric oxide production of some common vegetables.

"PA3-030A was used in western blot to investigate the antioxidant activity of some vegetables"

Authors: Bor JY,Chen HY,Yen GC

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2006

BMC neuroscience

### Scutellarin regulates microglia-mediated TNC1 astrocytic reaction and astrogliosis in cerebral ischemia in the adult rats.

"PA3-030A was used in immunocytochemistry and western blot to test if scutellarin affects reactive astrocytes in rats with middle cerebral artery occlusion"

Authors: Fang M,Yuan Y,Rangarajan P,Lu J,Wu Y,Wang H,Wu C,Ling EA

**Species**  
Rat

**Dilution**  
Not Cited

**Year**  
2015

[View more WB references on thermofisher.com](#)

## Immunohistochemistry (25)

Pathology oncology research : POR

### Immunohistochemical study of the angiogenetic network of VEGF, HIF1, VEGFR-2 and endothelial nitric oxide synthase (eNOS) in human breast cancer.

"PA3-030A was used in immunohistochemistry to study the expression of VEGF, VEGFR-2, HIF1-alpha and eNOS in invasive ductal carcinoma"

Authors: Kafousi M,Vrekoussis T,Tsentelierou E,Pavlakis K,Navrozoglou I,Dousias V,Sanidas E,Tsiftsis D,Georgoulas V,Stathopoulos EN

**Species**  
Human

**Dilution**  
1:300

**Year**  
2012

The Journal of surgical research

### Pretreatment with mineralocorticoid receptor blocker reduces intestinal injury induced by ischemia and reperfusion: involvement of inhibition of inflammatory response, oxidative stress, nuclear factor B, and inducible nitric oxide synthase.

"PA3-030A was used in immunohistochemistry to study the roles of oxidative stress, NFkB and iNOS in the mechanism by which pretreatment with a mineralocorticoid receptor blocker protects against ischemia-reperfusion-induced intestinal injury"

Authors: Ozacmak HS,Ozacmak VH,Barut F,Arasl M,Ucan BH

**Species**  
Rat

**Dilution**  
Not Cited

**Year**  
2014

[View more IHC references on thermofisher.com](#)

## More applications with references on thermofisher.com

IHC (P) (11)

IHC (F) (1)

ICC/IF (3)

Misc (1)

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