

Rabbit iNOS Polyclonal Antibody | anti-iNOS antibody

iNOS (Tyr-1055)[conserved site], phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71676	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

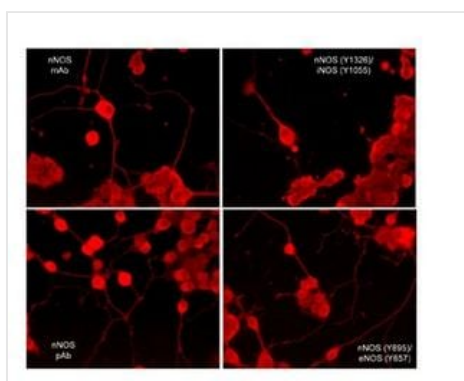
PRODUCT SYNONYMS

iNOS; Polyclonal Antibody; iNOS (Tyr-1055)[conserved site]; phospho-specific Antibody; phospho-specific; NOSi p Tyr; anti-iNOS antibody

PRODUCT SPECIFICATIONS

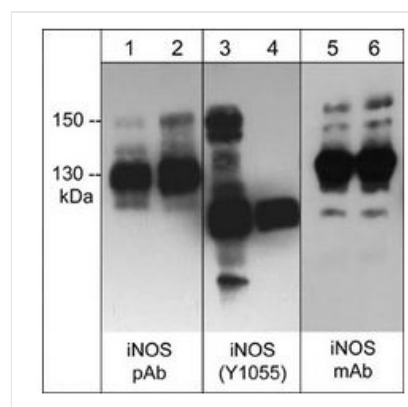
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	The antibody detects a 130kDa* protein corresponding to induced NOS on SDS-PAGE immunoblots of mouse macrophages treated with LPS followed by pervanadate. The antibody also detects a 150kDa doublet that corresponds with higher molecular weight forms of NOS, which are also observed using other anti-iNOS antibodies. In addition, the antibody detects a non-specific 120kDa band that has not been identified.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-iNOS antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-iNOS (Tyr-1055) synthetic peptide (coupled to carrier protein) corresponds to amino acids surrounding Tyr-1055 in human iNOS. This sequence is well conserved in rat and mouse iNOS, and has some homology to the conserved sites in eNOS (Tyr-1087) and nNOS (Tyr-1326).
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of nNOS phosphorylation in rat PC12 cells differentiated with NGF. The cells were probed with mouse monoclonal (mAb) nNOS (NM4011), and rabbit polyclonal (pAb) nNOS (C-terminal region), nNOS (Tyr-895)/eNOS (Tyr-657), and nNOS (Tyr-1326)/iNOS (Tyr-1055). The antibodies were detected using appropriate secondary antibody conjugated to DyLight 594.



WB (Western Blot)

Western blot analysis of mouse macrophages (J774A.1) treated with LPS (1ug/ml) for 18 hrs followed by pervanadate (1mM) for 30 min. (lanes 1, 3 & 5). The blots were then treated with alkaline phosphatase (lanes 2, 4 & 6). Blots were probed with rabbit polyclonal anti-inducible Nitric Oxide Synthase (iNOS) (lanes 1 & 2), anti-iNOS (Tyr-1055) (lanes 3 & 4), and mouse monoclonal anti-iNOS (lanes 5 & 6).

ADDITIONAL INFORMATION

Related Product Information for anti-iNOS antibody	Nitric oxide synthases (NOS), the enzymes responsible for synthesis of NO, are homodimers whose monomers are themselves two fused enzymes: a cytochrome reductase and a cytochrome that requires three cosubstrates (L-arginine, NADPH, and oxygen) and five cofactors or prosthetic groups (FAD, FMN, calmodulin, tetrahydrobiopterin, and heme). Several distinct NOS isoforms are produced from three distinct genes, inducible NOS (iNOS, NOS-II), neuronal NOS (bNOS, NOS-I), and endothelial NOS (eNOS, ecNOS, NOS-III). The inducible form of NOS, iNOS, is Ca2+ independent and is expressed in a broad range of cell types in response to stimulation with cytokines and exposure to microbial products. Phosphorylation of iNOS may regulate its activity and stability. Src kinase-induced phosphorylation of Tyr-1055 in iNOS reduces proteasomal degradation of iNOS, leading to increased NO production. Thus, phosphorylation may be an additional control for regulating iNOS activity in response to inflammatory conditions.
References	Tyryshkin, A. et al. (2009) J Biol Chem. 285(1):784. Kleinert, H. et al. (2003) Biol Chem. 384(10-11):1343. Xie, Q.W. et al. (1992) Science 256:225.

NCBI AND UNIPROT INFORMATION

NCBI GI #	24041029
NCBI GeneID	4843
NCBI Accession #	NP_000616.3
NCBI GenBank Nucleotide #	NM_000625.4
UniProt Accession #	P35228; O60757; O94994; Q16263; Q16692; Q4TTS5; Q9UD42; A1L3U5; B7ZLY2
Molecular Weight	131,117 Da
NCBI Official Full Name	nitric oxide synthase, inducible
NCBI Official Synonym Full Names	nitric oxide synthase 2, inducible
NCBI Official Symbol	NOS2
NCBI Official Synonym Symbols	NOS; INOS; NOS2A; HEP-NOS
NCBI Protein Information	nitric oxide synthase, inducible; NOS type II; NOS, type II; inducible NOS; hepatocyte NOS; inducible NO synthase; nitric oxide synthase, macrophage; peptidyl-cysteine S-nitrosylase NOS2; nitric oxide synthase 2A (inducible, hepatocytes)
UniProt Protein Name	Nitric oxide synthase, inducible
UniProt Gene Name	NOS2
UniProt Synonym Gene Names	NOS2A; HEP-NOS; Inducible NOS; iNOS
UniProt Entry Name	NOS2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/inos-antibody-immunocytochemistry-western-blot-elisa/71676>