

iNOS Polyclonal Antibody

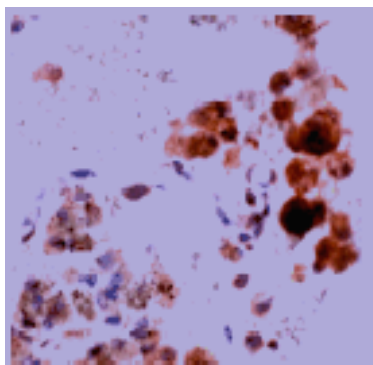
Product Specifications	
Catalog Number:	905-431
Host:	Rabbit
Species Reactivity:	Human, mouse, and rat; others not tested
Applications:	IHC: 1:100 for 10 min at RT <i>The optimal dilution for a specific application must be determined by the investigator</i> <i>Staining of formalin-fixed tissues requires boiling tissue sections in 10 Mm citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.</i>
Predicted m.w.:	~130 kDa
Concentration:	See product label
Purification:	Affinity Purified
Format:	10 mM PBS, pH 7.4, with BSA and sodium azide
Storage:	Store at 4°C <i>Shipping conditions may differ from the recommended storage temperature</i>
Immunogen:	Synthetic peptide derived from a sequence near the carboxy-terminus of mouse iNOS
Related Products:	
905-430	iNOS Polyclonal Antibody
KAS-NO001	iNOS Polyclonal Antibody

Background:

The diffusible free radical gas nitric oxide (NO) affects a variety of physiological functions, and is a key regulator of the cardiovascular, nervous, and immune systems¹⁻². NO is synthesized in many tissues from L-arginine, oxygen, and NADPH by three known isoforms of a heme-containing flavoprotein termed NO synthase (nNOS/NOS-I, iNOS/NOS-II, and eNOS/NOS-III)³⁻⁵. iNOS/NOS-II (inducible NOS) was first isolated from macrophages, and named to reflect its induction in diverse cell types by proinflammatory cytokines, lipopolysaccharide (LPS), and other inflammatory mediators⁶. iNOS induction is thought to require activation of NF-κB, which binds specific recognition elements in the iNOS promoter, thereby activating transcription⁷. Unlike the Ca²⁺-dependent constitutive eNOS and nNOS isoforms, iNOS is calmodulin-regulated, and is able to sustain NO production at basal Ca²⁺ levels⁶.

References:

1. Marletta, M. (1994) *Cell* **78**, 927-930.
2. Nathan, C., *et al.* (1994) *Cell* **78**, 915-918.
3. Bredt, D.S., *et al.* (1991) *Nature* **351**, 714-718.
4. Lamas, S., *et al.* (1992) *Proc Nat Acad Sci USA*. **89**, 6348-6352.
5. Xie, Q., *et al.* (1992) *Science* **256**, 225-228.
6. Kolodziejwski, P.J., *et al.* (2004) *PNAS USA*. **101**, 18141-18146.
7. Poljakovic, M., *et al.* (2005) *J Urol*. **173**, 1000-1003.



Immunohistochemical analysis of Human lung stained with iNOS polyclonal antibody