

## eNOS Polyclonal Antibody

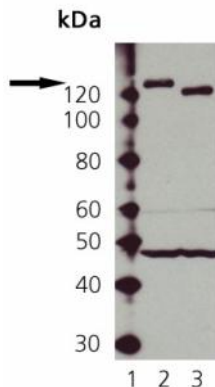
Product Specifications	
<b>Catalog Number:</b>	KAP-NO020
<b>Source:</b>	Rabbit
<b>Species Reactivity:</b>	Rat, mouse, human (weak)
<b>Applications:</b>	<b>WB:</b> 1:1000 (ECL)  Other applications not tested. <i>The optimal dilution for a specific application must be determined by the investigator</i>
<b>Predicted M.W.:</b>	~ 135 kDa
<b>Concentration:</b>	See product label
<b>Purification:</b>	Peptide Affinity
<b>Format:</b>	PBS, pH 7.2, 0.09% azide, 50% glycerol
<b>Storage:</b>	Store at -20°C <i>Shipping conditions may differ from the recommended storage temperature</i>
<b>Immunogen:</b>	Synthetic peptide derived from the sequence near the carboxy-terminus of human eNOS
<b>Related Products:</b>	
<b>NEW!</b> KAP-NO030	nNOS Polyclonal Antibody
<b>NEW!</b> KAP-NO032	nNOS (phospho-Ser1417) Polyclonal Antibody
SAB-300	Goat anti-Rabbit IgG Polyclonal Antibody, HRP Conjugate
917-020	Nitric Oxide (total) Detection Kit

### 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 systems<sup>1-2</sup>. NO is synthesized in many tissues from L-arginine, oxygen, and NADPH by three known isoforms of a heme-containing flavoprotein termed NO synthase (NOS-I/nNOS, NOS-II/iNOS, and NOS-III/eNOS)<sup>3-5</sup>. eNOS is a constitutively expressed isoform originally characterized in vascular endothelium. eNOS is activated by the interplay of eNOS binding proteins such as calmodulin and Hsp90, as well as by posttranslational modification of the protein by phosphorylation at multiple sites including Ser1177 (activating) and Thr495 (inhibiting)<sup>6</sup>. eNOS activation at Ser1177 can be triggered by many protein kinases including Akt/PKB, PKA, CAMKII, or by dephosphorylation of Thr495 by phosphatases such as PP2A<sup>7-8</sup>.

### 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. Chen, Z.P., *et al.* (1999) FEBS Lett. **443**, 285-289.
7. Fulton, D., *et al.* (1999) Nature **399**, 597-601.
8. Thomas, S.R. *et al.* (2002) J Biol Chem. **277**, 6017-6024.



**Western blot analysis** Lane 1: MWM, Lane 2: Rat Brain, Lane 3: Mouse Brain

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