

eNOS Polyclonal Antibody

Product Specifications

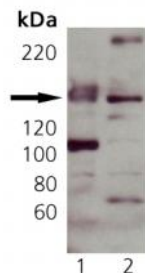
Catalog Number:	KAP-NO021												
Source:	Rabbit												
Species Reactivity:	Mouse and rat Other species not tested. Predicted to react with human, canine, rabbit, and pig based on 100% sequence homology.												
Applications:	WB: 1:500 (ECL) Other applications not tested. <i>The optimal dilution for a specific application must be determined by the investigator</i>												
Predicted M.W.:	~ 135 kDa												
Concentration:	See product label												
Purification:	Peptide Affinity												
Format:	PBS, pH 7.2, 0.09% azide, 50% glycerol												
Storage:	Store at -20°C <i>Shipping conditions may differ from the recommended storage temperature</i>												
Immunogen:	Synthetic peptide derived from the sequence of human eNOS												
Related Products:	<table border="0"> <tr> <td>LYT-RB100</td> <td>Rat Brain Tissue Extract</td> </tr> <tr> <td>SAB-300</td> <td>Goat anti-Rabbit IgG Polyclonal Antibody, HRP Conjugate</td> </tr> <tr> <td>NEW! KAP-NO020</td> <td>eNOS Polyclonal Antibody</td> </tr> <tr> <td>NEW! KAP-NO030</td> <td>nNOS Polyclonal Antibody</td> </tr> <tr> <td>NEW! KAP-NO032</td> <td>nNOS (phospho-Ser1417) Polyclonal Antibody</td> </tr> <tr> <td>917-020</td> <td>Nitric Oxide (total) Detection Kit</td> </tr> </table>	LYT-RB100	Rat Brain Tissue Extract	SAB-300	Goat anti-Rabbit IgG Polyclonal Antibody, HRP Conjugate	NEW! KAP-NO020	eNOS Polyclonal Antibody	NEW! KAP-NO030	nNOS Polyclonal Antibody	NEW! KAP-NO032	nNOS (phospho-Ser1417) Polyclonal Antibody	917-020	Nitric Oxide (total) Detection Kit
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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 (NOS-I/nNOS, NOS-II/iNOS, and NOS-III/eNOS)³⁻⁵. 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)⁶. 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 PP2A⁷⁻⁸.

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: Mouse brain, Lane 2: Rat brain; probed with eNOS polyclonal antibody (product #KAP-NO021).

Assay Designs makes every effort to provide a consistent source of high quality polyclonal antibodies. However, due to variations inherent in this technology, investigators are urged to purchase sufficient quantities of a specific lot number if an identical antibody is required throughout a study.

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