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Store at -20C
#9586

eNOS (49G3) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H B	Sensitivity: Endogenous	MW (kDa): 140	Source/Isotype: Rabbit IgG1	UniProt ID: #P29474	Entrez-Gene Id: 4846
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Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

eNOS (49G3) Rabbit mAb detects endogenous levels of total eNOS protein.

Species predicted to react based on 100% sequence homology

Dog

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human eNOS.

Background

Endothelial nitric-oxide synthase (eNOS) is an important enzyme in the cardiovascular system. It catalyzes the production of nitric oxide (NO), a key regulator of blood pressure, vascular remodeling, and angiogenesis (1,2). The activity of eNOS is regulated by phosphorylation at multiple sites. The two most thoroughly studied sites are the activation site Ser1177 and the inhibitory site Thr495 (3). Several protein kinases including Akt/PKB, PKA, and AMPK activate eNOS by phosphorylating Ser1177 in response to various stimuli (4,5). In contrast, bradykinin and H₂O₂ activate eNOS activity by promoting both Ser1177 phosphorylation and Thr495 dephosphorylation (6,7).

Background References

1. Fulton, D. et al. (2001) *J Pharmacol Exp Ther* 299, 818-24.
2. Shaul, P.W. (2002) *Annu Rev Physiol* 64, 749-74.
3. Chen, Z.P. et al. (1999) *FEBS Lett* 443, 285-9.
4. Dimmeler, S. et al. (1999) *Nature* 399, 601-5.
5. Fulton, D. et al. (1999) *Nature* 399, 597-601.
6. Harris, M.B. et al. (2001) *J Biol Chem* 276, 16587-91.
7. Thomas, S.R. et al. (2002) *J Biol Chem* 277, 6017-24.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **B:** Bovine

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