

#9570 Store at **-20°C**

Phospho-eNOS (Ser1177) (C9C3) Rabbit mAb

- Small 100 μ l (10 western blots)
- Large 300 μ l (30 western blots)



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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #4846
 Swiss-Prot Acc. #P29474

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, E-P Endogenous	B, Pg, (H, M, R)	140 kDa	Rabbit IgG**

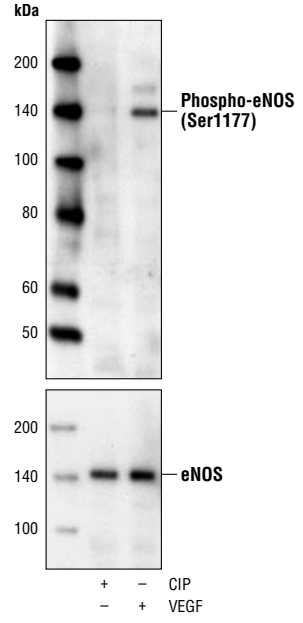
Background: Endothelial nitric-oxide synthase (eNOS) is an important enzyme in the cardiovascular system. It catalyzes the production of nitric oxide (NO), a key regulator of blood pressure, vascular remodeling and angiogenesis (1,2). The activity of eNOS is regulated by phosphorylation at multiple sites. 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 hydrogen peroxide activate eNOS activity by promoting Thr495 dephosphorylation (6,7).

Specificity/Sensitivity: Phospho-eNOS (Ser1177) (C9C3) Rabbit mAb detects endogenous levels of eNOS only when phosphorylated at Ser1177.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser1177 of human eNOS.

Background References:

- Fulton, D. et al. (2001) *J. Pharmacol. Exp. Ther.* 299, 818–824.
- Shaul, P.W. (2002) *Annu. Rev. Physiol.* 64, 749–774.
- Chen, Z.P. et al. (1999) *FEBS Lett.* 443, 285–289.
- Dimmeler, S. et al. (1999) *Nature* 399, 601–605.
- Fulton, D. et al. (1999) *Nature* 399, 597–601.
- Harris, M.B. et al. (2001) *J. Biol. Chem.* 276, 16587–16591.
- Thomas, S.R. et al. (2002) *J. Biol. Chem.* 277, 6017–6024.



Western blot analysis of extracts from BAEC cells, phosphatase or VEGF-treated, using Phospho-eNOS (Ser1177) (C9C3) Rabbit mAb (upper) or eNOS Antibody #9572 (lower).

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

***Species cross-reactivity is determined by western blot.**
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:25
ELISA (Peptide)	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.