Rabbit (polyclonal) Anti-eNOS (pS^{116}) Phosphospecific Antibody, Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number:	44-446 (10 blot size)
Lot Number:	See product label
Quantity/Volume:	See product label
Form of Antibody:	Purified rabbit polyclonal immunoglobulin in phosphate buffered saline, pH 7.4.
Preservation:	0.02% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	Purified from rabbit serum by epitope affinity chromatography.
Immunogen:	This antibody was produced against a chemically synthesized phosphopeptide derived from the human eNOS sequence, corresponding to the serine 116 phosphorylation site.
Specificity:	The endothelial form of nitric oxide synthase (eNOS) is a calcium/calmodulin dependent enzyme which undergoes several post-translational modifications, including acylation with myristate and palmitate, and phosphorylation on numerous residues. As with the other members of the NOS family, which also includes nNOS and iNOS, the endothelial form of nitric oxide synthase (eNOS) derives the diffusible multifunctional second messenger NO from L-arginine through a series of reactions in which L-citrulline is an intermediate. eNOS plays an important role in controlling vascular tone, platelet aggregation, and cardiac myocyte function. This antibody recognizes bovine eNOS when phosphorylated at serine 116, a negative regulatory site. VEGF may activate eNOS by stimulating dephosphorylation of this site. Based on calphostin inhibition, it is likely that protein kinase C catalyzes the phosphorylation of this site. Interestingly, phosphorylation is enhanced in myristoylation deficient mutants which implicates a role for caveolae targeting in the regulation of this site.
Species Reactivity:	Bovine. Other species were not tested.
Applications:	This antibody is suitable for use in ELISA, Western blotting, and immunoprecipitation.
Suggested Working Dilutions:	The recommended concentration for use in immunoprecipitation is 3-5 µg/extract from 10^7 cells; for Western blotting, 0.5-2.0 µg/mL; and for ELISA, 0.1-1.0 µg/mL. The optimal concentration should be determined for each specific application.
Recommended Positive Control:	Bovine pulmonary artery endothelial cells.
Storage:	Store at 2-8°C for up to one month. For long term storage, apportion into working aliquots and store at –20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

This product is for research use only. Not for use in diagnostic procedures.

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This antibody is manufactured under a licensed process covered by Patent # 5, 599, 681.
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Expiration Date: Expires one year from date of receipt when stored as instructed.

References:

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