#9572 Store at -20C

eNOS Antibody



Orders: 877-616-CELL (2355)

orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com

cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications: Reactivity: Sensitivity: MW (kDa): Source: **UniProt ID:** Entrez-Gene Id: WR H B Pg Endogenous 140 Rabbit #P29474 4846 **Product Usage** Application Dilution Information Western Blotting 1:1000

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

Specificity / Sensitivity eNOS Antibody detects endogenous levels of total eNOS protein.

Species predicted to react based on 100% sequence homology:

Dog

Source / Purification Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to

residues around Ser600 of human eNOS. Antibodies are purified by protein A and peptide affinity

chromatography.

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 BSA, 1X TBS,

0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key WB: Western Blotting

Cross-Reactivity Key H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus 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

GP: Guinea Pig Rab: rabbit All: all species expected

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more

information.

Limited Uses

eNOS Antibody (#9572) Datasheet Without Images Cell Signaling Technology

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.