

# DDAH I (C-19): sc-26068

## BACKGROUND

DDAH, a dimethylarginine dimethylaminohydrolase, hydrolyzes dimethyl arginine (ADMA) and monomethyl arginine (MMA), both inhibitors of nitric oxide synthases, and may be involved in *in vivo* modulation of nitric oxide production. Impairment of DDAH causes ADMA accumulation and a reduction in cGMP generation. DDAH II, the predominant DDAH isoform in endothelial cells, facilitates the induction of nitric oxide synthesis by all-trans-Retinoic acid (atRA). DDAH proteins are highly expressed in colon, kidney, stomach and liver tissues.

## CHROMOSOMAL LOCATION

Genetic locus: DDAH1 (human) mapping to 1p22.3; Ddah1 (mouse) mapping to 3 H2.

## SOURCE

DDAH I (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDAH I of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26068 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DDAH I (C-19) is recommended for detection of DDAH I of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DDAH I (C-19) is also recommended for detection of DDAH I in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DDAH I siRNA (h): sc-105276, DDAH I siRNA (m): sc-142914, DDAH I shRNA Plasmid (h): sc-105276-SH, DDAH I shRNA Plasmid (m): sc-142914-SH, DDAH I shRNA (h) Lentiviral Particles: sc-105276-V and DDAH I shRNA (m) Lentiviral Particles: sc-142914-V.

Molecular Weight of DDAH I: 31 kDa.

Positive Controls: DDAH I (m): 293T Lysate: sc-119696 or KNRK whole cell lysate: sc-2214.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

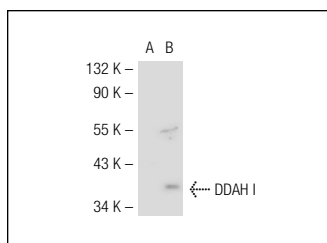
## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

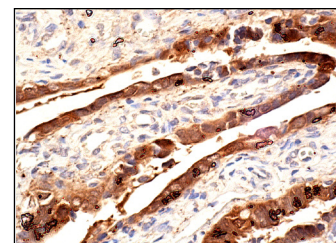
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



DDAH I (C-19): sc-26068. Western blot analysis of DDAH I expression in non-transfected: sc-117752 (A) and mouse DDAH I transfected: sc-119696 (B) 293T whole cell lysates.



DDAH I (C-19): sc-26068. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic and nuclear staining of glandular cells.

## SELECT PRODUCT CITATIONS

- Tain, Y.L., et al. 2007. Vitamin E reduces glomerulosclerosis, restores renal neuronal NOS, and suppresses oxidative stress in the 5/6 nephrectomized rat. *Am. J. Physiol. Renal Physiol.* 292: F1404-F1410.
- Moningka, N.C., et al. 2011. Protective actions of nebivolol on chronic nitric oxide synthase inhibition-induced hypertension and chronic kidney disease in the rat: a comparison with angiotensin II receptor blockade. *Nephrol. Dial. Transplant.* 27: 913-920.
- Whittle, N., et al. 2011. Changes in brain protein expression are linked to magnesium restriction-induced depression-like behavior. *Amino Acids.* 40: 1231-1248.
- Novella, S., et al. 2012. Estradiol, acting through estrogen receptor  $\alpha$ , restores dimethylarginine dimethylaminohydrolase activity and nitric oxide production in oxLDL-treated human arterial endothelial cells. *Mol. Cell. Endocrinol.* 365: 11-16.



Try **DDAH I (D-6): sc-514841** or **DDAH I (C-4): sc-271337**, our highly recommended monoclonal alternatives to DDAH I (C-19).