BACKGROUND

Endothelial nitric oxide synthase (eNOS) interacting protein (NOSIP) is a modulator of eNOS activity. eNOS is an important nitric oxide (NO)-generating enzyme of the vasculature that is regulated by interactions with caveolin-1, Ca²⁺-calmodulin, HSP 90 and NOSIP. NOSIP modulates this activity by promoting the translocation of eNOS from the plasma membrane to intracellular sites, which in turn inhibits NO synthesis. NOSIP is involved in controlling airway and vascular diameter, synthesis of NO in ciliated epithelia and mucosal secretion and is an important protein for mucociliary and bronchial function. NOSIP is highly expressed in endothelial cells and vascularized tissue.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: NOSIP (human) mapping to 19q13.33; Nosip (mouse) mapping to 7B4.

SOURCE

NOSIP (C-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 19-41 near the N-terminus of NOSIP of human origin.

PRODUCT

Each vial contains 200 µg IgG₂κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-365363 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

NOSIP (C-2) is recommended for detection of NOSIP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NOSIP (C-2) is also recommended for detection of NOSIP in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for NOSIP siRNA (h): sc-45708, NOSIP siRNA (m): sc-45709, NOSIP shRNA Plasmid (h): sc-45708-SH, NOSIP shRNA Plasmid (m): sc-45708-SH, NOSIP shRNA (h) Lentiviral Particles: sc-45708-V and NOSIP shRNA (m) Lentiviral Particles: sc-45709-V.

Molecular Weight of NOSIP: 34 kDa.

Positive Controls: NOSIP (h): 293T Lysate: sc-112273, WI-38 whole cell lysate: sc-384260 or A549 cell lysate: sc-2413.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:


DATA

To ensure optimal results, the following support reagents are recommended:


STORAGE

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

RESEARCH USE

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