**NOS2 (C-11): sc-7271**

**BACKGROUND**

Nitric oxide (NO) has a broad range of biological activities and has been implicated in signaling pathways in phylogenetically diverse species. Nitric oxide synthases (NOSs), the enzymes responsible for synthesis of NO, contain an N-terminal oxygenase domain and a C-terminal reductase domain. NOS activity requires homodimerization as well as three co-substrates (L-arginine, NADPH and O₂) and five cofactors or prosthetic groups (FAO, FMN, calmodulin, tetrahydrobiopterin and heme). Several distinct NOS isoforms have been described and been shown to represent the products of three distinct genes. These include two constitutive Ca²⁺/CaM-dependent forms of NOS, including NOS1 (also designated nNOS) whose activity was first identified in neurons, and NOS3 (also designated eNOS), first identified in endothelial cells. The inducible form of NOS, NOS2 (also designated iNOS), is Ca²⁺-independent and is expressed in a broad range of cell types.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: NOS2 (human) mapping to 17q11.2; Nos2 (mouse) mapping to 11 B5.

**SOURCE**

NOS2 (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1120-1145 near the C-terminus of NOS2 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. NOS2 (C-11) is available conjugated to agarose (sc-7271 AC), 500 µg/0.25 ml, for Western Blotting. NOS2 (C-11) is recommended for detection of NOS2 (iNOS) 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], flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of NOS2: 130 kDa. Positive Controls: RAW 264.7 + LPS/PMA cell lysate: sc-2212 or RAW 264.7 + LPS/IFN-γ cell lysate: sc-24767.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**STORAGE**

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