Active Nitric Oxide Synthase 2, Inducible (NOS2)

Catalog No.: TP09257 50μg

Sequence Information

Species: Human **Gene ID:**4843

Swiss Prot:P35228 **Synonyms:**NOS2A; INOS; HEP-NOS; I-NOS; Hepatocytes Oxide Synthase; Peptidyl-cysteine S-nitrosylase NOS2

Residues: Asp43~Asp213

DLQYHNLSKQQNESPQPLVETGKKSPESLVKLDATPLSSPRHVRIKNWGSGMTF

QDTLHHKAKGILTCRSKSCLGSIMTPKSLTRGPRDKPTPPDELLPQAIEFVNQY

YGSFKEAKIEEHLARVEAVTKEIETTGTYQLTGDELIFATKQAWRNAPRCIGRI

QWSNLQVFD

Product Information

Source: Recombinant expression.

Host: *E.coli*

Tags: N-terminal His-Tag

Subcellular Location: Secreted

Purity: >90%

Traits: Freeze-dried powder

Buffer formulation: PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Original Concentration: 200μg/mL

Applications: Positive Control; Immunogen; SDS-PAGE; WB.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 7.8

Predicted Molecular Mass: 20.6kDa

Accurate Molecular Mass: 20kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in ddH_2O to a concentration of 0.1-0.5 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[ACTIVITY]

Nitric oxide synthase 2, inducible (NOS2) is a member of Nitric oxidesynthases(NOSs) family. Nitric oxide synthases (NOSs) are a family of enzymes catalyzingthe production of nitric oxide (NO) from L-arginine. NO is an important cellularsignaling molecule. It helps modulate vascular tone, insulin secretion, airwaytone, and peristalsis, and is involved in angiogenesis and neural development. Besides, Ubiquitin Carboxyl Terminal Hydrolase L5 (UCHL5) has been identifiedasaninteractor of NOS2, thus a binding ELISA assay was conducted to detect theinteraction of recombinant mouse NOS2 and recombinant mouse UCHL5. Briefly, NOS2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samplesof100uL were then transferred to UCHL5-coated microtiter wells and incubatedfor2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-NOS2pAb, then aspirated and washed 3 times. After incubation with HRPlabelledsecondary antibody, wells were aspirated and washed 3 times. With theadditionofsubstrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add50μLstop solution to the wells and read at 450nm immediately. The bindingactivityofNOS2 and UCHL5 was shown in Figure 1, and this effect was in a dosedependentmanner.

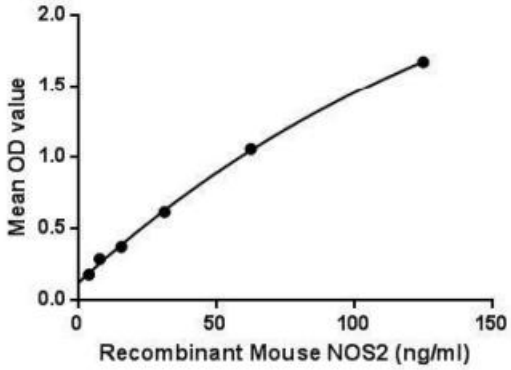

Figure 1. The binding activity of NOS2 with UCHL5.

[IDENTIFICATION]

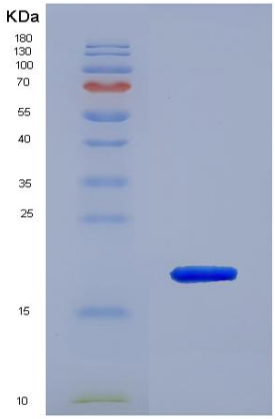

Figure 2. SDS-PAGE

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.