**Nucleoredoxin (E-12): sc-393748**

**BACKGROUND**

Nucleoredoxin, also known as NXN, NRX or TRG-4, is a 435 amino acid cytoplasmic and nuclear protein that is conserved between mammalian species and acts as a redox-dependent negative regulator of the Wnt signaling pathway. Widely expressed in adult tissues, Nucleoredoxin is also found in the nervous system and the limb buds of embryos at day 10.5-11.5. Containing a conserved thioredoxin (TRX) domain and a catalytic motif for oxidoreductase activity, Nucleoredoxin is implied to function as a transcriptional regulator and acts as a redox-dependent negative regulator of the Wnt signaling pathway. Widely expressed in adult tissues, Nucleoredoxin is also found in the nervous system and the limb buds of embryos at day 10.5-11.5. Containing a conserved thioredoxin (TRX) domain and a catalytic motif for oxidoreductase activity, Nucleoredoxin is implied to function as a transcriptional regulator and acts as a redox-dependent negative regulator of the Wnt signaling pathway. Widely expressed in adult tissues, Nucleoredoxin is also found in the nervous system and the limb buds of embryos at day 10.5-11.5. Containing a conserved thioredoxin (TRX) domain and a catalytic motif for oxidoreductase activity, Nucleoredoxin is implied to function as a transcriptional regulator and acts as a redox-dependent negative regulator of the Wnt signaling pathway. Widely expressed in adult tissues, Nucleoredoxin is also found in the nervous system and the limb buds of embryos at day 10.5-11.5. Containing a conserved thioredoxin (TRX) domain and a catalytic motif for oxidoreductase activity, Nucleoredoxin is implied to function as a transcriptional regulator and acts as a redox-dependent negative regulator of the Wnt signaling pathway.


**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: NXN (human) mapping to 17p13.3; Nxn (mouse) mapping to 11 B5.

**SOURCE**

Nucleoredoxin (E-12) is a mouse monoclonal antibody raised against amino acids 125-189 mapping within an internal region of Nucleoredoxin of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Nucleoredoxin (E-12) is available conjugated to agarose (sc-393748 AC), 500 µg/0.25 ml agarose in 1 ml, for IP, to HRP (sc-393748 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393748 PE), fluorescein (sc-393748 FITC), Alexa Fluor® 488 (sc-393748 AF488), Alexa Fluor® 546 (sc-393748 AF546), Alexa Fluor® 594 (sc-393748 AF594) or Alexa Fluor® 647 (sc-393748 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393748 AF680) or Alexa Fluor® 790 (sc-393748 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

Nucleoredoxin (E-12) is recommended for detection of Nucleoredoxin 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).

Suitable for use as control antibody for Nucleoredoxin siRNA (h): sc-93857, Nucleoredoxin siRNA (m): sc-150094, Nucleoredoxin siRNA Plasmid (h): sc-93857-SH, Nucleoredoxin siRNA Plasmid (m): sc-150094-SH, Nucleoredoxin siRNA (h) Lentiviral Particles: sc-93857-V and Nucleoredoxin siRNA (m) Lentiviral Particles: sc-150094-V.

Molecular Weight of Nucleoredoxin: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, human heart extract: sc-363763 or human liver extract: sc-363766.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-29491 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Nucleoredoxin (E-12): sc-393748. Western blot analysis of Nucleoredoxin expression in HeLa whole cell lysate (A) and human heart (B) tissue extracts. Nucleoredoxin (E-12): sc-393748. Western blot analysis of Nucleoredoxin expression in HeLa (A) and F9 (B) whole cell lysates.

**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.

**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.