# NARFL (L-14): sc-160561



The Power to Question

## **BACKGROUND**

Prenylation and methylation are two forms of protein modification, both of which are important for a variety of functions, including membrane attachment, protein-protein interactions and signaling events. NARFL (nuclear prelamin A recognition factor-like), also known as cytosolic Fe-S cluster assembly factor NARFL, HPRN, PRN (protein related to Narf), LET1L or IOP1 (iron-only hydrogenase-like protein 1), is a 476 amino acid protein belonging to the NARF family. Widely expressed, NARFL is required for extramitochondrial sulfur and iron protein maturation and may indirectly negatively regulate HIF-1 $\alpha$  expression. Existing as three alternatively spliced isoforms, NARFL is encoded by a gene that maps to human chromosome 16p13.3 and murine chromosome 17 A3.3.

# **REFERENCES**

- Daniels, R.J., Peden, J.F., Lloyd, C., Horsley, S.W., Clark, K., Tufarelli, C., Kearney, L., Buckle, V.J., Doggett, N.A., Flint, J. and Higgs, D.R. 2001. Sequence, structure and pathology of the fully annotated terminal 2 Mb of the short arm of human chromosome 16. Hum. Mol. Genet. 10: 339-352.
- 2. Huang, J., Song, D., Flores, A., Zhao, Q., Mooney, S.M., Shaw, L.M. and Lee, F.S. 2007. IOP1, a novel hydrogenase-like protein that modulates hypoxia-inducible factor-1α activity. Biochem. J. 401: 341-352.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611118. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 4. Song, D. and Lee, F.S. 2008. A role for IOP1 in mammalian cytosolic ironsulfur protein biogenesis. J. Biol. Chem. 283: 9231-9238.
- Song, D., Tu, Z. and Lee, F.S. 2009. Human ISCA1 interacts with IOP1/ NARFL and functions in both cytosolic and mitochondrial iron-sulfur protein biogenesis. J. Biol. Chem. 284: 35297-35307.

## CHROMOSOMAL LOCATION

Genetic locus: NARFL (human) mapping to 16p13.3; Narfl (mouse) mapping to 17 A3.3.

# **SOURCE**

NARFL (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NARFL of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160561 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

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

#### **APPLICATIONS**

NARFL (L-14) is recommended for detection of NARFL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with NARF.

NARFL (L-14) is also recommended for detection of NARFL in additional species, including bovine.

Suitable for use as control antibody for NARFL siRNA (h): sc-93253, NARFL siRNA (m): sc-149831, NARFL shRNA Plasmid (h): sc-93253-SH, NARFL shRNA Plasmid (m): sc-149831-SH, NARFL shRNA (h) Lentiviral Particles: sc-93253-V and NARFL shRNA (m) Lentiviral Particles: sc-149831-V.

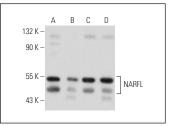
Molecular Weight of NARFL: 53 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Hep G2 cell lysate: sc-2227 or A-10 cell lysate: sc-3806.

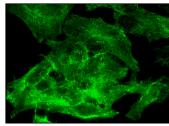
## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA







NARFL (L-14): sc-160561. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization.

#### **RESEARCH USE**

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

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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