

NUBPL (S-12): sc-137646

BACKGROUND

NUBPL (nucleotide-binding protein-like) is a 319 amino acid mitochondrial protein that belongs to the Mrp/NBP35 ATP-binding protein family and exists as 2 alternatively spliced isoforms. Required for the assembly of the mitochondrial membrane respiratory chain NADH dehydrogenase (complex I), NUBPL may deliver one or more Fe-S clusters to complex I subunits. With highest expression in liver and kidney, NUBPL is expressed at significant levels in small intestine and brain. Defects in NUBPL are a cause of mitochondrial complex I deficiency (MT-C1D), a disorder of the mitochondrial respiratory chain that causes a wide range of afflictions from lethal neonatal disease to adult-onset neurodegenerative disorders. Phenotypes include macrocephaly with progressive leukodystrophy, non-specific encephalopathy, cardiomyopathy, myopathy, liver disease, Leigh syndrome, Leber hereditary optic neuropathy and some forms of Parkinson disease.

CHROMOSOMAL LOCATION

Genetic locus: NUBPL (human) mapping to 14q12; Nubpl (mouse) mapping to 12 C1.

SOURCE

NUBPL (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NUBPL of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137646 P, (100 µg 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

NUBPL (S-12) is recommended for detection of NUBPL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with NUBP1 or NUBP2.

NUBPL (S-12) is also recommended for detection of NUBPL in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for NUBPL siRNA (h): sc-92266, NUBPL siRNA (m): sc-150092, NUBPL shRNA Plasmid (h): sc-92266-SH, NUBPL shRNA Plasmid (m): sc-150092-SH, NUBPL shRNA (h) Lentiviral Particles: sc-92266-V and NUBPL shRNA (m) Lentiviral Particles: sc-150092-V.

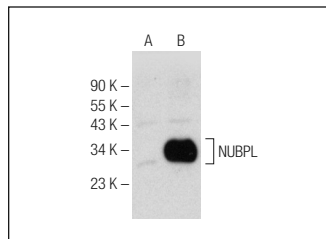
Molecular Weight of NUBPL isoforms: 34/18 kDa.

Positive Controls: NUBPL (h): 293T lysate: sc-113739.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NUBPL (S-12): sc-137646. Western blot analysis of NUBPL expression in non-transfected: sc-117752 (A) and human NUBPL transfected: sc-113739 (B) 293T whole cell lysates.

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.



Try **NUBPL (G-11): sc-398217** or **NUBPL (G-7): sc-393245**, our highly recommended monoclonal alternatives to NUBPL (S-12).