

NEPH3 (5E6): sc-81795

BACKGROUND

NEPH3 (nephrin-like protein 3), also referred to as NLG1, FILTRIN or KIRREL2 (kin of IRRE-like 2), is a 708 amino acid protein that is a member of the immunoglobulin superfamily of cell adhesion molecules. NEPH3 consists of five extracellular Ig-like repeats, a transmembrane domain, several glycosylation sites and a cytoplasmic domain that has a stretch of nine conserved residues. NEPH3 localizes to the interpodocyte filtration slit in the kidney and to the Langerhans islet β cells in the pancreas. NEPH3 is thought to be involved in the maintenance of the glomerular filtration barrier in the kidney and in pancreas development. Downregulation of NEPH3 is implicated in several proteinuric diseases. Five isoforms exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KIRREL2 (human) mapping to 19q13.12.

SOURCE

NEPH3 (5E6) is a mouse monoclonal antibody raised against recombinant NEPH3 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NEPH3 (5E6) is recommended for detection of NEPH3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NEPH3 siRNA (h): sc-75899, NEPH3 shRNA Plasmid (h): sc-75899-SH and NEPH3 shRNA (h) Lentiviral Particles: sc-75899-V.

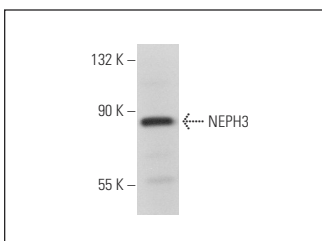
Molecular Weight of NEPH3: 107 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Jurkat whole cell lysate: sc-2204.

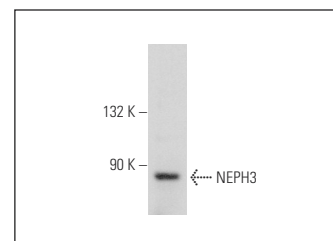
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



NEPH3 (5E6): sc-81795. Western blot analysis of NEPH3 expression in Jurkat whole cell lysate.



NEPH3 (5E6): sc-81795. Western blot analysis of NEPH3 expression in HeLa nuclear extract.

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 web site at www.scbt.com for detailed protocols and support products.