NANP (D-8): sc-374637

**BACKGROUND**

Sialic acids are a family of 9-carbon 2-keto-3-deoxy sugars that are found on the ends of glycoproteins and glycolipids and play important roles in recognition events within the cell. Playing an important role in cell-cell and protein-protein recognition, N-acetylneuraminic acid is the main form of sialic acid in vertebrates. NANP (N-acetylneuraminate-9-phosphatase), also known as HDHD4 (haloacid dehalogenase-like hydrolase domain-containing protein 4), is a 248 amino acid protein that belongs to the haloacid dehalogenase (HAD) family and is responsible for dephosphorylating NeuAc-9-phosphate to form N-acetylneuraminic acid. Characteristic of the HAD phosphatase family, the catalytic activity of NANP is dependent upon the presence of magnesium and is inhibited by vanadate and calcium.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: NANP (human) mapping to 20p11.21; Nanp (mouse) mapping to 2 G3.

**SOURCE**

NANP (D-8) is a mouse monoclonal antibody raised against amino acids 42-93 mapping within an internal region of NANP 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.

NANP (D-8) is available conjugated to agarose (sc-374637 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374637 HRP), 200 μg/ml, for WB, IHC/IP and ELISA; to either phycoerythrin (sc-374637 PE), fluorescein (sc-374637 FITC), Alexa Fluor® 488 (sc-374637 AF488), Alexa Fluor® 546 (sc-374637 AF546), Alexa Fluor® 594 (sc-374637 AF594) or Alexa Fluor® 647 (sc-374637 AF647), 200 μg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-374637 AF680) or Alexa Fluor® 790 (sc-374637 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

NANP (D-8) is recommended for detection of NANP 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), immunohistochemistry (including paraffin-embedded sections) (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 NANP siRNA (h): sc-75870, NANP siRNA (m): sc-149821, NANP shRNA Plasmid (h): sc-75870-SH, NANP shRNA Plasmid (m): sc-149821-SH, NANP shRNA (h) Lentiviral Particles: sc-75870-V and NANP shRNA (m) Lentiviral Particles: sc-149821-V.

Molecular Weight of NANP: 30 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, IMR-32 cell lysate: sc-2409 or F9 cell lysate: sc-2245.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range 1:1000-1:10000, Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Binding 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).

**DATA**

![Image](https://via.placeholder.com/150)

NANP (D-8): sc-374637. Western blot analysis of NANP expression in SH-SY5Y (A), SK-N-SH (B), IMR-32 (C) and F9 (D) whole cell lysates.

NANP (D-8): sc-374637. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic staining of squamous epithelial cells.

**STORAGE**

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

**PROTOCOLS**

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