

NIBP (N-14): sc-100063

BACKGROUND

NIBP (NIK- and IKKB-binding protein), also known as TRAPPC9 (trafficking protein particle complex 9), IBP, T1 or TRS120, is an 1,148 amino acid protein that localizes to the cytoplasm and the Golgi apparatus, as well as to the endoplasmic reticulum (ER). Highly expressed in kidney and muscle and present at lower levels in heart, brain and placenta, NIBP exists as a component of the TRAPP (transport protein particle) complex and is thought to play a role in neuronal cell differentiation and ER to Golgi vesicular transport. Additionally, NIBP, which exists as multiple alternatively spliced isoforms, functions as an NF κ B activator, specifically by promoting increased phosphorylation of IKK proteins. The gene encoding NIBP maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

1. Nomura, F., Kawai, T., Nakanishi, K. and Akira, S. 2000. NF κ B activation through IKK-i-dependent I-TRAF/TANK phosphorylation. *Genes Cells* 5: 191-202.
2. Nagase, T., Kikuno, R. and Ohara, O. 2001. Prediction of the coding sequences of unidentified human genes. XXI. The complete sequences of 60 new cDNA clones from brain which code for large proteins. *DNA Res.* 8: 179-187.
3. Hu, W.H., Pendergast, J.S., Mo, X.M., Brambilla, R., Bracchi-Ricard, V., Li, F., Walters, W.M., Blits, B., He, L., Schaal, S.M. and Bethea, J.R. 2005. NIBP, a novel NIK and IKK β -binding protein that enhances NF κ B activation. *J. Biol. Chem.* 280: 29233-29241.
4. Häcker, H. and Karin, M. 2006. Regulation and function of IKK and IKK-related kinases. *Sci. STKE* 2006: re13.
5. Kümmel, D., Oeckinghaus, A., Wang, C., Krappmann, D. and Heinemann, U. 2008. Distinct isocomplexes of the TRAPP trafficking factor coexist inside human cells. *FEBS Lett.* 582: 3729-3733.

CHROMOSOMAL LOCATION

Genetic locus: TRAPPC9 (human) mapping to 8q24.3; Trappc9 (mouse) mapping to 15 D3.

SOURCE

NIBP (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NIBP of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100063 P, (100 μ 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

NIBP (N-14) is recommended for detection of NIBP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 NIBP siRNA (h): sc-77839, NIBP siRNA (m): sc-149968, NIBP shRNA Plasmid (h): sc-77839-SH, NIBP shRNA Plasmid (m): sc-149968-SH, NIBP shRNA (h) Lentiviral Particles: sc-77839-V and NIBP shRNA (m) Lentiviral Particles: sc-149968-V.

Molecular Weight of NIBP: 139 kDa.

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) 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.

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.