

Niban (H-240): sc-135370

BACKGROUND

Meaning "second" in Japanese, Niban, also known as FAM129A and cell growth-inhibiting gene 39 protein, is a 928 amino acid cytoplasmic protein that regulates phosphorylation of many proteins that are involved in translation regulation, such as eIF2 α , 4E-BP1 and p70 S6 kinase α . Since it ultimately functions as an activator of proteins, Niban has been implicated as a tumor marker for renal carcinoma, thyroid cancer and head and neck squamous cell carcinoma. Endoplasmic reticular stress induced in Niban knockout mice leads to upregulation of eIF2 α and decreased phosphorylation of p70 S6 kinase α and 4E-BP1. Niban suppression eventually leads to apoptosis, therefore illustrating its involvement in the modulation of cell death signaling by regulating translation.

REFERENCES

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5. Matsumoto, F., Fujii, H., Abe, M., Kajino, K., Kobayashi, T., Matsumoto, T., Ikeda, K. and Hino, O. 2006. A novel tumor marker, Niban, is expressed in subsets of thyroid tumors and Hashimoto's thyroiditis. *Hum. Pathol.* 37: 1592-1600.

CHROMOSOMAL LOCATION

Genetic locus: FAM129A (human) mapping to 1q25.3; Fam129a (mouse) mapping to 1 G2.

SOURCE

Niban (H-240) is a rabbit polyclonal antibody raised against amino acids 1-240 mapping at the N-terminus of Niban 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.

STORAGE

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

APPLICATIONS

Niban (H-240) is recommended for detection of Niban of mouse, rat and 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)], 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).

Niban (H-240) is also recommended for detection of Niban in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Niban siRNA (h): sc-78648, Niban siRNA (m): sc-149967, Niban shRNA Plasmid (h): sc-78648-SH, Niban shRNA Plasmid (m): sc-149967-SH, Niban shRNA (h) Lentiviral Particles: sc-78648-V and Niban shRNA (m) Lentiviral Particles: sc-149967-V.

Molecular Weight (predicted) of Niban: 103 kDa.

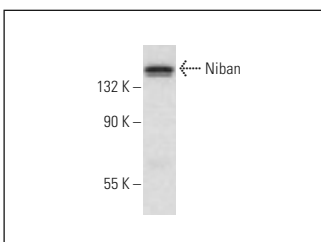
Molecular Weight (observed) of Niban: 151 kDa.

Positive Controls: Hs 181 Tes whole cell lysate: sc-364779.

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



Niban (H-240): sc-135370. Western blot analysis of Niban expression in Hs 181.Tes whole cell lysate.

RESEARCH USE

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



Try **Niban (F-10): sc-374636**, our highly recommended monoclonal alternative to Niban (H-240).