

Code No. 28131

**Anti-Rat  
Niban (53) Rabbit IgG Affinity Purify**

Volume : 100 µg

**Introduction** : *Niban* has been cloned from cell lines derived from Eker rat by AFLP-Differential Display method as a novel gene which is increased in the early stage of renal carcinogenesis (ref. 6). Then, it has been reported that Niban protein is expressed in various cancer tissues including thyroid cancer. In research of recent years, it has been reported that Niban is an ER stress-inducible protein and it regulates phosphorylation of eIF2 $\alpha$  and S6K1/4E-BP1 (ref. 3).

**Antigen** : Synthetic peptide of a part of rat Niban (TDLLPKLKGKKNDRKRA)

**Purification** : Purified with antigen peptide

**Form** : Lyophilized product from PBS containing 1 % BSA and 0.05 % NaN<sub>3</sub>

**How to use** : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

**Stability** : Lyophilized product, 5 years at 2 – 8 °C  
: Solution, 2 years at –20 °C

**Application** : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after microwave treatment (10 min, 10 mM citrate buffer, pH 6.0). The recommended concentration is about 1 µg/mL, however, the concentration should be optimized by each laboratory.  
: This antibody can be used for western blotting in concentration of about 5 µg /mL.

**Reference** : 1. Ji H, Ding Z, Hawke D, Xing D, Jiang BH, Mills GB, Lu Z. AKT-dependent phosphorylation of Niban regulates nucleophosmin- and MDM2-mediated p53 stability and cell apoptosis. *EMBO Rep.* 2012 Jun 1;13(6):554-60.  
2. Ito S, Fujii H, Matsumoto T, Abe M, Ikeda K, Hino O. Frequent expression of Niban in head and neck squamous cell carcinoma and squamous dysplasia. *Head Neck.* 2010 Jan;32(1):96-103.  
3. Sun GD, Kobayashi T, Abe M, Tada N, Adachi H, Shiota A, Totsuka Y, Hino O. The endoplasmic reticulum stress-inducible protein Niban regulates eIF2 $\alpha$  and S6K1/4E-BP1 phosphorylation. *Biochem Biophys Res Commun.* 2007 Aug 17;360(1):181-7.  
4. Matsumoto F, Fujii H, Abe M, Kajino K, Kobayashi T, Matsumoto T, Ikeda K, Hino O. A novel tumor marker, Niban, is expressed in subsets of thyroid tumors and Hashimoto's thyroiditis. *Hum Pathol.* 2006 Dec;37(12):1592-600.  
5. Adachi H, Majima S, Kon S, Kobayashi T, Kajino K, Mitani H, Hirayama Y, Shiina H, Igawa M, Hino O. Niban gene is commonly expressed in the renal tumors: a new candidate marker for renal carcinogenesis. *Oncogene.* 2004 Apr 22;23(19):3495-500.  
6. Majima S, Kajino K, Fukuda T, Otsuka F, Hino O. A novel gene "*Niban*" upregulated in renal carcinogenesis: cloning by the cDNA-amplified fragment length polymorphism approach. *Jpn J Cancer Res.* 2000 Sep;91(9):869-74.

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

Distributed by:



Immuno-Biological Laboratories, Inc. Toll-Free: 888-523-1246  
8201 Central Ave NE, Suite P Email: info@IBL-America.com  
Minneapolis, MN 55432 Web: www.IBL-America.com