

# Polyclonal Anti-NUR77 Picoband™ Antibody

Catalog Number: PB9766

## Description

<b>Gene Name</b>	nuclear receptor subfamily 4, group A, member 1
<b>Recommended Protein Name</b>	Nuclear receptor subfamily 4 group A member 1
<b>Lot No.</b>	0971512Da1466116
<b>Size</b>	100µg/vial
<b>Form</b>	lyophilized
<b>Ig type</b>	Rabbit IgG
<b>Specificity</b>	No cross reactivity with other proteins.
<b>Purification</b>	Immunogen affinity purified.
<b>Species</b>	<b>Reacts with:</b> human, mouse, rat
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human NUR77 (372-408aa HLDSGPSTAKLDYSKFQELVLPFHGKEDAGDVQQFYD), different from the related mouse sequence by one amino acid, and from the related rat sequence by two amino acids.
<b>Contents</b>	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .

## Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu, Ms, Rat	-

**Tested Species:** In-house tested species with positive results.

*Other applications have not been tested.*

*Optimal dilutions should be determined by end users.*

## Preparation and storage

**Reconstitution:** 0.2ml of distilled water will yield a concentration of 500µg/ml.

**Storage:** At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

## Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

## Background

NR4A1 (NUCLEAR RECEPTOR SUBFAMILY 4, GROUP A, MEMBER 1), also called NAK1, GFRP1, TR3, NUR77 or NGFIB, is a protein that in humans is encoded by the NR4A1 gene, which is also a member of the Nur nuclear receptor family of intracellular transcription factors. The NR4A1 gene is mapped on 12q13.13. NR4A1 is involved in cell cycle mediation, inflammation and apoptosis. It plays a key role in mediating inflammatory responses in macrophages. In addition, subcellular localization of the NR4A1 protein appears to play a key role in the survival and death of cells. Nr4a1 is overexpressed in Wnt1 -transformed mouse mammary cells. Nr4a1 is also induced by lithium, a Wnt1 mimic, and the Nr4a1 promoter is activated by lithium and beta-catenin, a Wnt1 downstream effector. In contrast, human NR4A1 is not upregulated by beta-catenin, indicating that this gene is regulated differently in human and mouse cells. Adenoviral expression of Nr4a1 induces genes involved in gluconeogenesis, stimulates glucose production both in vitro and in vivo, and raises blood glucose levels.

## Reference

1. Chang, C., Kokontis, J., Liao, S. S., Chang, Y. Isolation and characterization of human TR3 receptor: a member of steroid receptor superfamily. *J. Steroid Biochem.* 34: 391-395, 1989.
2. Dequiedt, F., Kasler, H., Fischle, W., Kiermer, V., Weinstein, M., Herndier, B. G., Verdin, E. HDAC7, a thymus-specific class II histone deacetylase, regulates Nur77 transcription and TCR-mediated apoptosis. *Immunity* 18: 687-698, 2003.
3. Forman, B. M., Umesono, K., Chen, J., Evans, R. M. Unique response pathways are established by allosteric interactions among nuclear hormone receptors. *Cell* 81: 541-550, 1995.