

Anti-NUR77 Picoband Antibody

Catalog # ABO12452

Specification

Anti-NUR77 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP22736HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Nuclear receptor subfamily 4 group A member 1(NR4A1)detection. Tested with WB in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-NUR77 Picoband Antibody - Additional Information

Gene ID 3164

Other Names Nuclear receptor subfamily 4 group A member 1, Early response protein NAK1, Nuclear hormone receptor NUR/77, Nur77, Orphan nuclear receptor HMR, Orphan nuclear receptor TR3, ST-59, Testicular receptor 3, NR4A1, GFRP1, HMR, NAK1

Calculated MW 64463 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization Cytoplasm. Nucleus.

Tissue Specificity Fetal muscle and adult liver, brain and thyroid.

Protein Name Nuclear receptor subfamily 4 group A member 1

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human NUR77 (372-408aa HLDSGPSTAKLDYSKFQELVLPHFGKEDAGDVQQFYD), different from the related mouse sequence by one amino acid, and from the related rat sequence by two amino acids.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, 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.

Anti-NUR77 Picoband Antibody - Protein Information

Name NR4A1

Synonyms GFRP1, HMR, NAK1

Function

Orphan nuclear receptor. Binds the NGFI-B response element (NBRE) 5'-AAAGGTCA-3' (PubMed:18690216, PubMed:8121493, PubMed:9315652). Binds 9-cis-retinoic acid outside of its ligand- binding (NR LBD) domain (PubMed:18690216). Participates in energy homeostasis by sequestrating the kinase STK11 in the nucleus, thereby attenuating cytoplasmic AMPK activation (PubMed:<a href="http://www.uniprot.org/citations during inflammation, including repressing the transcription of genes involved in the citric acid cycle (TCA) (By similarity). Inhibits NF-kappa-B signaling by binding to low-affinity NF-kappa-B binding sites, such as at the IL2 promoter (PubMed:15466594). May act concomitantly with NR4A2 in regulating the expression of delayed-early genes during liver regeneration (By similarity). Plays a role in the vascular response to injury (By similarity).

Cellular Location

Nucleus. Cytoplasm, cytosol. Mitochondrion Note=Nuclear export to the cytosol is XPO1-mediated and positively regulated by IFI27 (PubMed:22427340). Translocation to the mitochondrion upon interaction with RXRA and upon the presence of 9-cis retinoic acid (PubMed:17761950).

Tissue Location

Fetal muscle and adult liver, brain and thyroid.

Anti-NUR77 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



• <u>Cell Culture</u> Anti-NUR77 Picoband Antibody - Images

130KD-¹²³⁴ 100KD -70KD -55KD -35KD-25KD-15KD -

Anti- NUR77 Picoband antibody, ABO12452, Western blottingAll lanes: Anti NUR77 (ABO12452) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: U87 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 67KDObserved bind size: 67KD

Anti-NUR77 Picoband Antibody - 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.