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Anti-NUR77 Antibody
Catalog # ABO10990

Specification

Anti-NUR77 Antibody - Product Information

Application	**WB**
Primary Accession	P22736
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit 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 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 Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human NUR77(99-112aa ASFKFEDFQVYGCY), identical to the related rat and mouse sequences.

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.**

Sequence Similarities
Belongs to the nuclear hormone receptor family. NR4 subfamily.

Anti-NUR77 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:22983157). Regulates the inflammatory response in macrophages by regulating metabolic adaptations 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 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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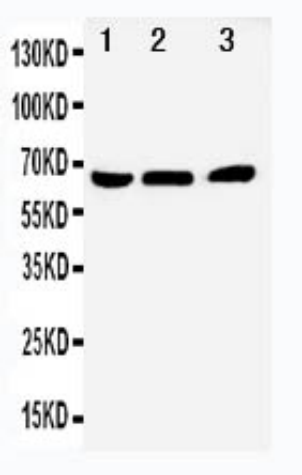
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NUR77 Antibody - Images



Anti-NUR77 antibody, ABO10990, Western blottingLane 1: A431 Cell LysateLane 2: HELA Cell LysateLane 3: JURKAT Cell Lysate

Anti-NUR77 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 was overexpressed in Wnt1 -transformed mouse mammary cells. Nr4a1 was also induced by lithium, a Wnt1 mimic, and the Nr4a1 promoter was activated by lithium and beta-catenin, a Wnt1 downstream effector. In contrast, human NR4A1 was not upregulated by beta-catenin, indicating that this gene is regulated differently in human and mouse cells. Adenoviral expression of Nr4a1 induced genes involved in gluconeogenesis, stimulated glucose production both in vitro and in vivo, and raised blood glucose levels.