

# Nur77 Polyclonal Antibody

Catalog # AP71396

## **Product Information**

| Application       | WB, IHC-P                 |
|-------------------|---------------------------|
| Primary Accession | <u>P22736</u>             |
| Reactivity        | Human, Mouse, Rat, Monkey |
| Host              | Rabbit                    |
| Clonality         | Polyclonal                |
| Calculated MW     | 64463                     |

#### **Additional Information**

| Gene ID            | 3164   |
|--------------------|--|
| Other Names        | NR4A1; GFRP1; HMR; NAK1; Nuclear receptor subfamily 4 group A member 1;<br>Early response protein NAK1; Nuclear hormone receptor NUR/77; Nur77;<br>Orphan nuclear receptor HMR; Orphan nuclear receptor TR3; ST-59; Testicular<br>receptor 3 |
| Dilution           | WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.<br>ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A   |
| Format             | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.  |
| Storage Conditions | -20°C  |

#### **Protein Information**

| Name     | NR4A1   |
|----------|---|
| Synonyms | GFRP1, HMR, NAK1  |
| Function | Orphan nuclear receptor. Binds the NGFI-B response element (NBRE)<br>5'-AAAGGTCA-3' (PubMed: <u>18690216</u> , PubMed: <u>8121493</u> , PubMed: <u>9315652</u> ).<br>Binds 9-cis-retinoic acid outside of its ligand- binding (NR LBD) domain<br>(PubMed: <u>18690216</u> ). Participates in energy homeostasis by sequestrating the<br>kinase STK11 in the nucleus, thereby attenuating cytoplasmic AMPK activation<br>(PubMed: <u>22983157</u> ). Regulates the inflammatory response in macrophages<br>by regulating metabolic adaptations during inflammation, including<br>repressing the transcription of genes involved in the citric acid cycle (TCA) (By<br>similarity). Inhibits NF-kappa-B signaling by binding to low-affinity NF-kappa-B<br>binding sites, such as at the IL2 promoter (PubMed: <u>15466594</u> ). May act<br>concomitantly with NR4A2 in regulating the expression of delayed-early genes<br>during liver regeneration (By similarity). Plays a role in the vascular response<br>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.  |

### Background

Orphan nuclear receptor. May act concomitantly with NURR1 in regulating the expression of delayed-early genes during liver regeneration. Binds the NGFI-B response element (NBRE) 5'- AAAAGGTCA-3' (By similarity). May inhibit NF-kappa-B transactivation of IL2. Participates in energy homeostasis by sequestrating the kinase STK11 in the nucleus, thereby attenuating cytoplasmic AMPK activation. Plays a role in the vascular response to injury (By similarity).

#### Images



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