10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



# **NUR77 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51399

#### **Product Information**

**Application** WB, IHC-P **Primary Accession** P22736

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW64463

## **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

**Dilution** WB~~1:1000 IHC-P~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name NR4A1

**Synonyms** GFRP1, HMR, NAK1

**Function** Orphan nuclear receptor. Binds the NGFI-B response element (NBRE)

5'-AAAGGTCA-3' (PubMed:<u>18690216</u>, PubMed:<u>8121493</u>, PubMed:<u>9315652</u>). Binds 9-cis-retinoic acid outside of its ligand- binding (NR LBD) domain (PubMed:<u>18690216</u>). Participates in energy homeostasis by sequestrating the kinase STK11 in the nucleus, thereby attenuating cytoplasmic AMPK activation (PubMed:<u>22983157</u>). 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.

# **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.

## References

Nakai A.,et al.Mol. Endocrinol. 4:1438-1443(1990). Chang C.,et al.J. Steroid Biochem. 34:391-395(1989). Ohkura N.,et al.Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases. Kobayashi T.,et al.Submitted (DEC-2008) to the EMBL/GenBank/DDBJ databases. Kaighin V.A.,et al.Submitted (DEC-2010) to the EMBL/GenBank/DDBJ databases.

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