

**Phospho-NR4A1(S351) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3339a****Specification**

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**Phospho-NR4A1(S351) Antibody - Product Information**

Application	DB,E
Primary Accession	<a href="#">P22736</a>
Other Accession	<a href="#">P22829</a> , <a href="#">P12813</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

**Phospho-NR4A1(S351) 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

**Target/Specificity**

This NR4A1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S351 of human NR4A1.

**Dilution**

DB~~1:500

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Phospho-NR4A1(S351) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-NR4A1(S351) 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 sequestering 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).

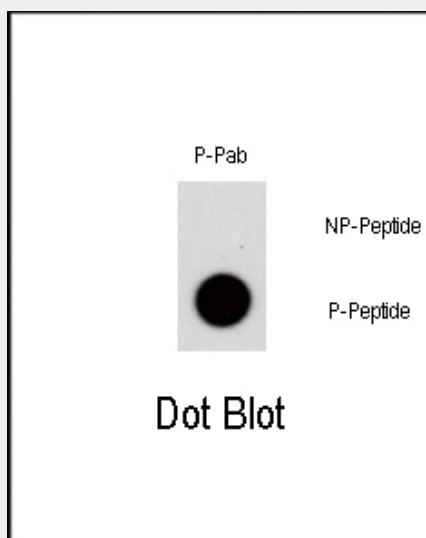
**Tissue Location**

Fetal muscle and adult liver, brain and thyroid.

**Phospho-NR4A1(S351) Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Phospho-NR4A1(S351) Antibody - Images**

Dot blot analysis of Phospho-NR4A1-S351 polyclonal antibody (Cat# AP3339a) on nitrocellulose

membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentration was 0.5ug per ml. P-Pab: phospho-antibody; P-Peptide: phospho-peptide; NP-Peptide: non-phospho-peptide.

#### **Phospho-NR4A1(S351) Antibody - Background**

NR4A1 is a member of the steroid-thyroid hormone-retinoid receptor superfamily. Expression is induced by phytohemagglutinin in human lymphocytes and by serum stimulation of arrested fibroblasts. The encoded protein acts as a nuclear transcription factor. Translocation of the protein from the nucleus to mitochondria induces apoptosis.

#### **Phospho-NR4A1(S351) Antibody - References**

Lu, L., et al., J. Clin. Endocrinol. Metab. 89(8):4113-4118 (2004).  
Castro-Obregon, S., et al., J. Biol. Chem. 279(17):17543-17553 (2004).  
Lin, B., et al., Cell 116(4):527-540 (2004).  
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Ye, X., et al., Int. J. Biochem. Cell Biol. 36(1):98-113 (2004).