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

Specification

Phospho-NR4A1(S351) Antibody - Product Information

Application	**DB,E**
Primary Accession	P22736
Other Accession	P22829, P12813
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

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:9315652, PubMed:8121493). 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).

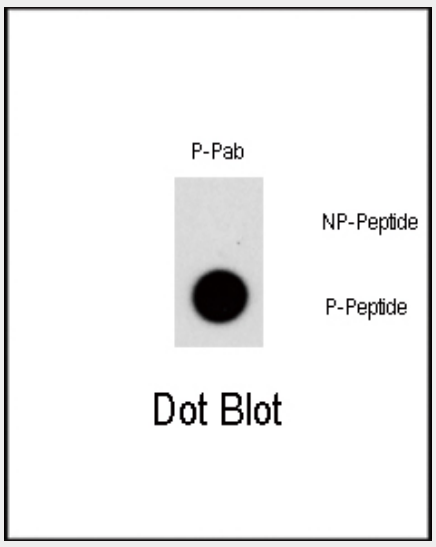
Tissue Location
Fetal muscle and adult liver, brain and thyroid.

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 Cytomety
- 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).
Choi, J.W., et al., Cancer Res. 64(1):35-39 (2004).
Ye, X., et al., Int. J. Biochem. Cell Biol. 36(1):98-113 (2004).