

Phospho-NR4A1(S351) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3339a**Specification**

Phospho-NR4A1(S351) Antibody Blocking peptide - Product InformationPrimary Accession [P22736](#)**Phospho-NR4A1(S351) Antibody Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody [AP3339a](/product/products/AP3339a) was selected from the region of human Phospho-NR4A1-S351. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-NR4A1(S351) Antibody Blocking peptide - Protein Information

Name NR4A1

Synonyms GFRP1, HMR, NAK1

Function

Orphan nuclear receptor. Binds the NGFI-B response element (NBRE) 5'-AAAGGTCA-3' (PubMed: [18690216](http://www.uniprot.org/citations/18690216), PubMed: [9315652](http://www.uniprot.org/citations/9315652), PubMed: [8121493](http://www.uniprot.org/citations/8121493)). Binds 9-cis-retinoic acid outside of its ligand-binding (NR LBD) domain (PubMed: [18690216](http://www.uniprot.org/citations/18690216)). Participates in energy homeostasis by sequestering the kinase STK11 in the nucleus, thereby attenuating cytoplasmic AMPK activation (PubMed: [22983157](http://www.uniprot.org/citations/22983157))

target="_blank">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 Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-NR4A1(S351) Antibody Blocking peptide - Images

Phospho-NR4A1(S351) Antibody Blocking peptide - 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 Blocking peptide - 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).