

# NURR1 (NR4A2) Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP6412b

## Specification

# NURR1 (NR4A2) Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>P43354</u>

# NURR1 (NR4A2) Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 4929

**Other Names** 

Nuclear receptor subfamily 4 group A member 2, Immediate-early response protein NOT, Orphan nuclear receptor NURR1, Transcriptionally-inducible nuclear receptor, NR4A2, NOT, NURR1, TINUR

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP6412b>AP6412b</a> was selected from the NR4A2 region of human NURR1 (NR4A2). 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.

# NURR1 (NR4A2) Antibody (C-term) Blocking Peptide - Protein Information

Name NR4A2

Synonyms NOT, NURR1, TINUR

### Function

Transcriptional regulator which is important for the differentiation and maintenance of meso-diencephalic dopaminergic (mdDA) neurons during development (PubMed:<a href="http://www.uniprot.org/citations/17184956" target="\_blank">17184956</a>, PubMed:<a href="http://www.uniprot.org/citations/15716272" target="\_blank">15716272</a>). It is crucial for expression of a set of genes such as SLC6A3, SLC18A2, TH and DRD2 which are essential for development of mdDA neurons (By similarity).

### **Cellular Location**

Cytoplasm. Nucleus. Note=Mostly nuclear; oxidative stress promotes cytoplasmic localization



#### **Tissue Location**

Expressed in a number of cell lines of T-cell, B- cell and fibroblast origin. Strong expression in brain tissue

# NURR1 (NR4A2) Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

# NURR1 (NR4A2) Antibody (C-term) Blocking Peptide - Images

## NURR1 (NR4A2) Antibody (C-term) Blocking Peptide - Background

Parkinson's disease (PD) is a multifactorial disease that appears to arise from the effects of both genetic and environmental influences. The known genetic factors include multiple genes that have been identified in related parkinsonian syndromes, as well as alpha-synuclein. Genes associated with either PD or Parkinson-related disorders include parkin, DJ-1, ubiquitin C-terminal hydrolase isozyme L1 (UCH-L1), nuclear receptor-related factor 1 (NURR1), and alpha-synuclein. Nurr1 is a transcription factor that is expressed in the embryonic ventral midbrain and is critical for the development of dopamine (DA) neurons. It belongs to the conserved family of nuclear receptors but lacks an identified ligand and is therefore referred to as an orphan receptor. RXR ligands can promote the survival of DA neurons via a process that depends on Nurr1-RXR heterodimers. In developing DA cells, Nurr1 is required for the expression of several genes important for DA synthesis and function. Nurr1 is also important for the maintenance of adult DA neurons.

## NURR1 (NR4A2) Antibody (C-term) Blocking Peptide - References

Perlmann T, et al. Cell Tissue Res. 318(1):45-52 (2004)Hsu HC,et al. Curr Drug Targets Inflamm Allergy. 3(4):413-23 (2004)Wallen-Mackenzie A, et al. Genes Dev. 17(24):3036-47 (2003)Ichinose,H., et al. Gene 230 (2), 233-239 (1999)Okabe,T., et al. J. Immunol. 154 (8), 3871-3879 (1995)Mages,H.W., et al. Mol. Endocrinol. 8 (11), 1583-1591 (1994)