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

NURR1 (NR4A2) Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP6412a

Specification

NURR1 (NR4A2) Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P43354

NURR1 (NR4A2) Antibody (N-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 AP6412a 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 (N-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:17184956, PubMed:15716272). 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 (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

NURR1 (NR4A2) Antibody (N-term) Blocking Peptide - Images

NURR1 (NR4A2) Antibody (N-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 (N-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)