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NURR1 (NR4A2) Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6412a

Specification

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

Application	**IF, WB, IHC-P,E**
Primary Accession	P43354
Other Accession	Q07917, Q06219, Q08E53
Reactivity	**Mouse**
Predicted	**Bovine, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**13-42**

NURR1 (NR4A2) Antibody (N-term) - 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
This NURR1 (NR4A2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-42 amino acids from the N-terminal region of human NURR1 (NR4A2).

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
NURR1 (NR4A2) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NURR1 (NR4A2) Antibody (N-term) - 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:15716272, PubMed:17184956). 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

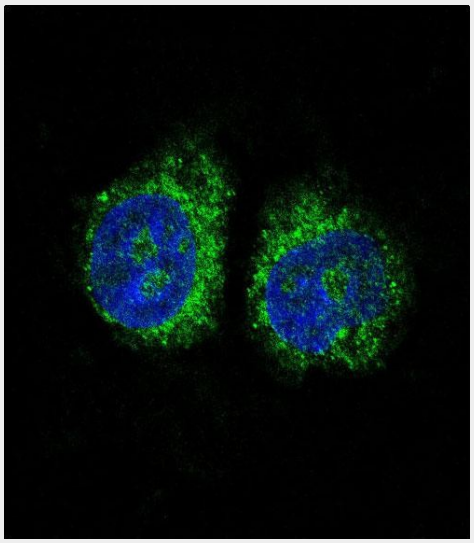
Tissue Location
Expressed in a number of cell lines of T-cell, B- cell and fibroblast origin. Strong expression in brain tissue

NURR1 (NR4A2) Antibody (N-term) - 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

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



Confocal immunofluorescent analysis of NURR1 (NR4A2) Antibody (N-term) (Cat#AP6412a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

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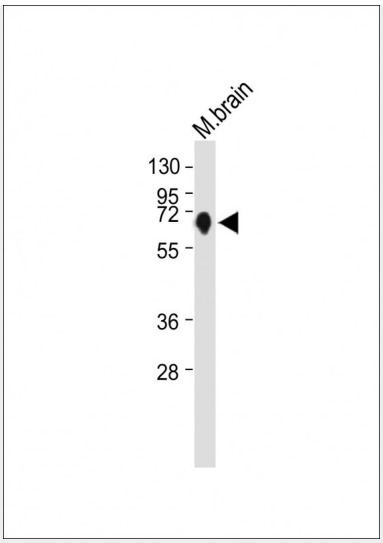
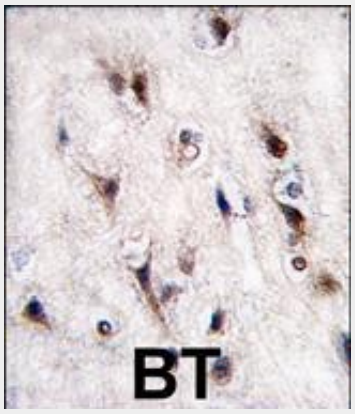


Anti-NURR1 (NR4A2) Antibody (N-term) at 1:1000 dilution + Mouse brain whole tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 67 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with NURR1 (NR4A2) antibody (N-term)(Cat#AP6412a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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

NURR1 (NR4A2) Antibody (N-term) - Citations

- Schizophrenia-like features in transgenic mice overexpressing human HO-1 in the astrocytic compartment.