

NDOR1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP57377

Product Information

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	Q9UHB4
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66763
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NDOR1
Epitope Specificity	51-150/597
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm > perinuclear region. Concentrated in perinuclear structure.
SIMILARITY	In the C-terminal section; belongs to the flavoprotein pyridine nucleotide cytochrome reductase family. Contains 1 FAD-binding FR-type domain. Contains 1 flavodoxin-like domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes an NADPH-dependent diflavin reductase that contains both flavin mononucleotide (FMN) and flavin adenine dinucleotide (FAD) binding domains. The encoded protein catalyzes the transfer of electrons from NADPH through FAD and FMN cofactors to potential redox partners. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2012]

Additional Information

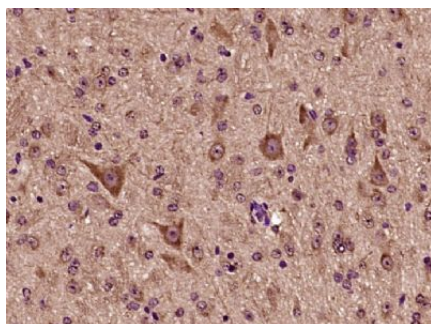
Gene ID	27158
Other Names	NADPH-dependent diflavin oxidoreductase 1 {ECO:0000255 HAMAP-Rule:MF_03178}, 1.18.1.- {ECO:0000255 HAMAP-Rule:MF_03178}, NADPH-dependent FMN and FAD-containing oxidoreductase {ECO:0000255 HAMAP-Rule:MF_03178}, Novel reductase 1, NDOR1 {ECO:0000255 HAMAP-Rule:MF_03178}, NR1
Target/Specificity	Low expression in brain, heart, kidney, pancreas, prostate and skeletal muscle. Highest levels in the placenta. Expressed in cancer cell lines including promyelocytic leukemia, HeLa S3, chronic myelogenous leukemia, lymphoblastic leukemia, Burkitt's lymphoma, colorectal adenocarcinoma, lung carcinoma, and melanoma G361.

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NDOR1 {ECO:0000255 HAMAP-Rule:MF_03178}
Function	NADPH-dependent reductase which is a central component of the cytosolic iron-sulfur (Fe-S) protein assembly (CIA) machinery (PubMed: 10625700 , PubMed: 15900210 , PubMed: 20802492 , PubMed: 23596212 , PubMed: 28648056). Transfers electrons from NADPH via its FAD and FMN prosthetic groups to the [2Fe-2S] cluster of CIAPIN1, another key component of the CIA machinery (PubMed: 20802492 , PubMed: 23596212 , PubMed: 28648056). In turn, this reduced cluster provides electrons for assembly of cytosolic iron-sulfur cluster proteins (PubMed: 20802492 , PubMed: 23596212). It can also reduce the [2Fe-2S] cluster of Cisd1 and activate this protein implicated in Fe/S cluster repair (PubMed: 28648056). In vitro can fully activate methionine synthase/MTR in the presence of soluble cytochrome b5/CYB5A (PubMed: 12871938).
Cellular Location	Cytoplasm, perinuclear region {ECO:0000255 HAMAP- Rule:MF_03178, ECO:0000269 PubMed:10625700, ECO:0000269 PubMed:12871939}. Note=Concentrated in perinuclear structure. {ECO:0000255 HAMAP-Rule:MF_03178, ECO:0000269 PubMed:12871939}
Tissue Location	Low expression in brain, heart, kidney, pancreas, prostate and skeletal muscle. Highest levels in the placenta. Expressed in cancer cell lines including promyelocytic leukemia, HeLaS3, chronic myelogenous leukemia, lymphoblastic leukemia, Burkitt's lymphoma, colorectal adenocarcinoma, lung carcinoma, and melanoma G-361

Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NDOR1) Polyclonal Antibody, Unconjugated (AP57377) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.