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Anti-MT-ND2 Antibody

Catalog # AP53690

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P03891
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38961

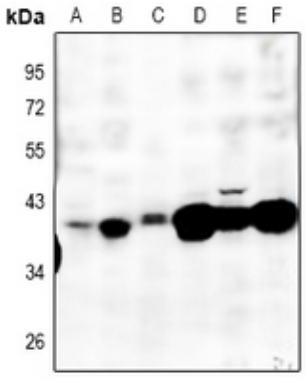
Additional Information

Gene ID	4536
Other Names	MTND2; NADH2; ND2; NADH-ubiquinone oxidoreductase chain 2; NADH dehydrogenase subunit 2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MT-ND2. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

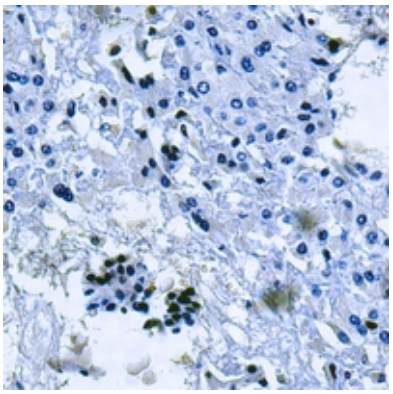
Protein Information

Name	MT-ND2 (HGNC:7456)
Synonyms	MTND2, NADH2, ND2
Function	Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) which catalyzes electron transfer from NADH through the respiratory chain, using ubiquinone as an electron acceptor (PubMed:16996290). Essential for the catalytic activity and assembly of complex I (PubMed:16996290).
Cellular Location	Mitochondrion inner membrane {ECO:0000250|UniProtKB:P03892}; Multi-pass membrane protein

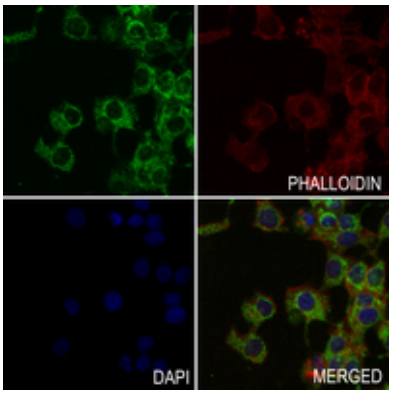
Images



Western blot analysis of MT-ND2 expression in rat kidney (A), AML12 (B), PC12 (C), HepG2 (D), HEK293T (E), A375 (F) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 39 kD)



Immunohistochemical analysis of MT-ND2 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MT-ND2 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).