

Product datasheet for CF503881

OriGene Technologies, Inc.

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NDUFA5 Mouse Monoclonal Antibody [Clone ID: OTI1E8]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1E8
Applications: IF, WB

Recommended Dilution: WB 1:2000, IF 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Human recombinant protein fragment corresponding to amino acids 3-116 of human

NDUFA5(NP_004991) produced in HEK293T cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 13.3 kDa

Gene Name: NADH:ubiquinone oxidoreductase subunit A5

Database Link: NP 004991

Entrez Gene 4698 Human

Q16718





Background:

The human NDUFA5 gene codes for the B13 subunit of complex I of the respiratory chain, which transfers electrons from NADH to ubiquinone. The high degree of conservation of NDUFA5 extending to plants and fungi indicates its functional significance in the enzyme complex. The protein localizes to the inner mitochondrial membrane as part of the 7 component-containing, water soluble 'iron-sulfur protein' (IP) fraction of complex I, although its specific role is unknown. It is assumed to undergo post-translational removal of the initiator methionine and N-acetylation of the next amino acid. The predicted secondary structure is primarily alpha helix, but the carboxy-terminal half of the protein has high potential to adopt a coiled-coil form. The amino-terminal part contains a putative beta sheet rich in hydrophobic amino acids that may serve as mitochondrial import signal. Related pseudogenes have also been identified on four other chromosomes. [provided by RefSeq]

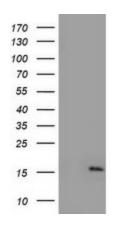
Synonyms:

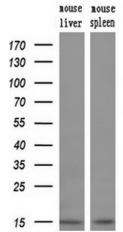
B13; CI-13kB; CI-13KD-B; NUFM; UQOR13

Protein Pathways:

Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

Product images:

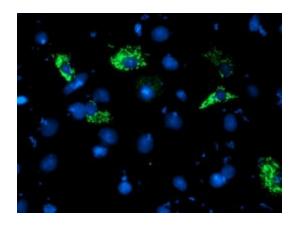




HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NDUFA5 (Cat# [RC201539], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NDUFA5 (Cat# [TA503881]). Positive lysates [LY417602] (100ug) and [LC417602] (20ug) can be purchased separately from OriGene.

Western blot analysis of extracts (10ug) from 2 different mouse tissues by using anti-NDUFA5 monoclonal antibody (1:200).





Anti-NDUFA5 mouse monoclonal antibody ([TA503881]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY NDUFA5 ([RC201539]).