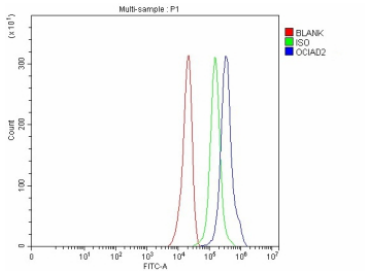
OCIAD2 Antibody / OCIA domain containing 2 (FY12299)

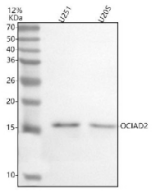
Catalog No.	Formulation	Size
FY12299	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q56VL3
Applications	Western Blot: 0.25-0.5ug/ml Flow Cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This OCIAD2 antibody is available for research use only.



Flow Cytometry analysis of U251 cells using anti-OCIAD2 antibody. Overlay histogram showing U251 cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-OCIAD2 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Western blot analysis of OCIAD2 using anti-OCIAD2 antibody. Lane 1: human U251 whole cell lysates, Lane 2: human U20S whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-OCIAD2 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. The expected molecular weight of OCIAD2 is ~17 kDa.

Description

OCIAD2 antibody detects OCIA domain-containing protein 2, encoded by the OCIAD2 gene on chromosome 4q31.21. OCIAD2 antibody is widely used in cancer biology, mitochondrial research, and developmental studies. OCIAD2 is a mitochondrial inner membrane protein implicated in oxidative phosphorylation regulation and cell signaling. It has been studied for its roles in ovarian cancer and other malignancies, where it influences tumor progression and chemoresistance.

Structurally, OCIAD2 is a ~17 kDa protein with a conserved OCIA domain mediating protein-protein interactions. It localizes to mitochondria and interacts with components of the respiratory chain. OCIAD2 may also associate with signaling molecules, linking mitochondrial metabolism with cell signaling pathways. Multiple isoforms may provide tissue-specific functions.

Functionally, OCIAD2 regulates mitochondrial activity by modulating electron transport chain components, influencing ATP production and reactive oxygen species generation. It has also been implicated in cell adhesion, proliferation, and survival. Researchers use OCIAD2 antibody to study mitochondrial function, cancer biology, and signaling networks.

Clinically, OCIAD2 is overexpressed in ovarian, lung, and breast cancers, correlating with poor prognosis and chemoresistance. It is being investigated as a biomarker of malignancy and as a therapeutic target. NSJ Bioreagents provides OCIAD2 antibody for studies of mitochondrial biology, cancer progression, and therapeutic development.

Experimentally, OCIAD2 antibody is used in western blotting to detect the ~17 kDa protein, in immunofluorescence to study mitochondrial localization, and in immunohistochemistry to analyze tumor expression. Co-immunoprecipitation with OCIAD2 antibody helps identify mitochondrial and signaling partners.

Application Notes

Optimal dilution of the OCIAD2 antibody should be determined by the researcher.

Immunogen

E.coli-derived human OCIAD2 recombinant protein (Position: A6-K138) was used as the immunogen for the OCIAD2 antibody.

Storage

After reconstitution, the OCIAD2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.