

Mouse Monoclonal Antibody to UFD1L

Purified Mouse Monoclonal Antibody Catalog # AO2394a

Product Information

Application WB, IHC, FC, ICC, E

Primary Accession

Reactivity

Human

Host

Clonality

Clone Names

Isotype

Monoclonal

2A6F3

Mouse IgG2b

Calculated MW 34500

Description The protein encoded by this gene forms a complex with two other proteins,

nuclear protein localization-4 and valosin-containing protein, and this complex is necessary for the degradation of ubiquitinated proteins. In addition, this complex controls the disassembly of the mitotic spindle and the formation of a closed nuclear envelope after mitosis. Mutations in this gene

have been associated with Catch 22 syndrome as well as cardiac and

craniofacial defects. Alternative splicing results in multiple transcript variants encoding different isoforms. A related pseudogene has been identified on

chromosome 18.;

Immunogen Purified recombinant fragment of human UFD1L (AA: 208-307) expressed in E.

Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

Application Note ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/200 - 1/1000;

FCM: 1/200 - 1/400

Additional Information

Gene ID 7353

Other Names UFD1

Dilution WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A E~~N/A

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

PrecautionsMouse Monoclonal Antibody to UFD1L is for research use only and not for use

in diagnostic or therapeutic procedures.

Protein Information

Name UFD1 (<u>HGNC:12520</u>)

Synonyms UFD1L

Function Essential component of the ubiquitin-dependent proteolytic pathway which

degrades ubiquitin fusion proteins. The ternary complex containing UFD1, VCP and NPLOC4 binds ubiquitinated proteins and is necessary for the export of misfolded proteins from the ER to the cytoplasm, where they are degraded by the proteasome. The NPLOC4-UFD1- VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope. It may be involved in the development of some ectoderm-derived structures (By similarity). Acts as a negative regulator of type I interferon production via the complex formed with VCP and NPLOC4, which binds to RIGI and recruits RNF125 to promote ubiquitination and

degradation of RIGI (PubMed: 26471729).

Cellular Location Nucleus {ECO:0000250 | UniProtKB:Q9ES53}. Cytoplasm, cytosol

{ECO:0000250 | UniProtKB:Q9ES53}

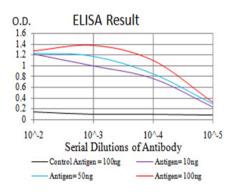
Tissue Location Found in adult heart, skeletal muscle and pancreas, and in fetal liver and

kidney

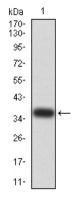
References

1.Proc Natl Acad Sci U S A. 2011 May 31;108(22):9119-24.; 2.Cell Biochem Funct. 2003 Sep;21(3):263-7.V;

Images

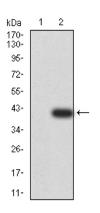


Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

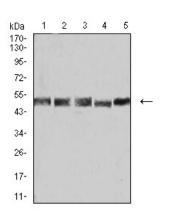


Western blot analysis using UFD1L mAb against human UFD1L (AA: 208-307) recombinant protein. (Expected MW is 36.8 kDa)

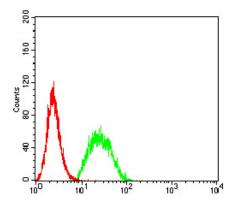
Western blot analysis using UFD1L mAb against HEK293 (1) and UFD1L (AA: 208-307)-hIgGFc transfected HEK293



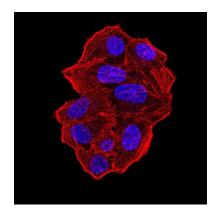
(2) cell lysate.



Western blot analysis using UFD1L mouse mAb against K562 (1), Hela (2), A431 (3), PC-2 (4), and A549 (5) cell lysate.

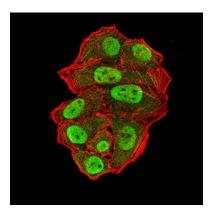


Flow cytometric analysis of Hela cells using UFD1L mouse mAb (green) and negative control (red).



Immunofluorescence analysis of Hela cells using UFD1L mouse mAb. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.

Immunofluorescence analysis of Hela cells using UFD1L mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher



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