

Mouse Monoclonal Antibody to UFD1L

Purified Mouse Monoclonal Antibody Catalog # AO2394a

Specification

Mouse Monoclonal Antibody to UFD1L - Product Information

Application WB, IHC, FC, ICC, E

Primary Accession
Reactivity
Host
Clonality
Host
Mouse
Clonality
Monoclonal
Reactivity
Monoclonal
Mouse IgG2b
Calculated MW
Monoclonal
Mouse IgG2b

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

Mouse Monoclonal Antibody to UFD1L - 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.



Precautions

Mouse Monoclonal Antibody to UFD1L is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Monoclonal Antibody to UFD1L - Protein Information

Name UFD1 (HGNC:12520)

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

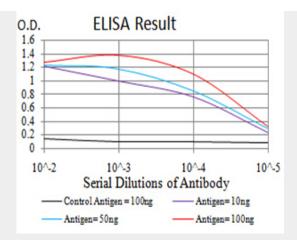
Mouse Monoclonal Antibody to UFD1L - Protocols

Provided below are standard protocols that you may find useful for product applications.

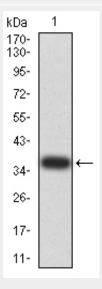
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Monoclonal Antibody to UFD1L - Images

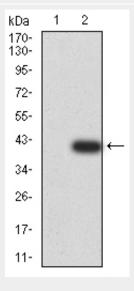




Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

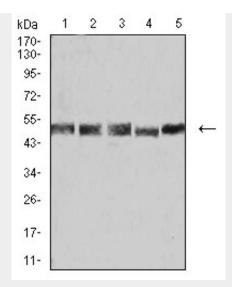


Western blot analysis using UFD1L mAb against human UFD1L (AA: 208-307) recombinant protein. (Expected MW is 36.8 kDa)

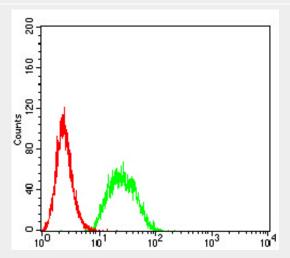


Western blot analysis using UFD1L mAb against HEK293 (1) and UFD1L (AA: 208-307)-hlgGFc transfected HEK293 (2) cell lysate.

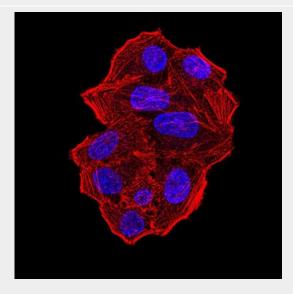




Western blot analysis using UFD1L mouse mAb against K562 (1), Hela (2), A431 (3), PC-2 (4), and A549 (5) cell lysate.



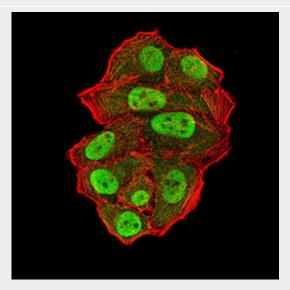
Flow cytometric analysis of Hela cells using UFD1L mouse mAb (green) and negative control (red).



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

Mouse Monoclonal Antibody to UFD1L - 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;