abcam

ab181743

Anti-DIS3L2 antibody [6C7B2]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human DIS3L2 aa 1-250. The exact immunogen used to generate this antibody is proprietary information. Database link Q8IYB7
Clone number	6C7B2
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant fragment - Human
Dilution info	1/500 - 1/2000
Notes	-

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Target data

See full target information DIS3L2

Function	3'-5'-exoribonuclease that specifically recognizes RNAs polyuridylated at their 3' end and mediates their degradation. Component of an exosome-independent RNA degradation pathway that mediates degradation of both mRNAs and miRNAs that have been polyuridylated by a terminal uridylyltransferase, such as ZCCHC11/TUT4. Mediates degradation of cytoplasmic mRNAs that have been deadenylated and subsequently uridylated at their 3'. Mediates degradation of uridylated pre-let-7 miRNAs, contributing to the maintenance of embryonic stem (ES) cells. Essential for correct mitosis, and negatively regulates cell proliferation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	DIS3L2 also known as DIS3-like exonuclease 2 is a protein involved in RNA processing and degradation. Mechanically it functions as a 3'-5' exonuclease meaning it removes nucleotides one by one from the 3' end of RNA molecules. The protein has a molecular mass of approximately 110 kDa. It is mainly expressed in the cytoplasm where it plays a critical role in maintaining RNA stability and turnover. DIS3L2 is present in various tissues with notable expression in the kidney and reproductive organs.
Biological function summary	The protein contributes to RNA metabolism by degrading small non-coding RNAs such as ribosomal RNA (rRNA) and transfer RNA (tRNA) fragments. It is not known to be part of a complex instead acting as an individual enzyme. DIS3L2 helps control the quantity and quality of RNA molecules in cells preventing accumulation of aberrant or excessive RNAs that can disrupt cellular processes.
Pathways	DIS3L2 participates in the RNA surveillance pathway ensuring proper RNA processing and maturation. This surveillance system involves several proteins that recognize and degrade abnormal RNAs therefore preserving genomic integrity.

	DIS3L2 collaborates with components of the exosome complex to achieve this function. In the regulatory RNAs pathway it interacts with proteins that manage microRNA decay thereby influencing gene expression by modulating microRNA levels.
Associated diseases and disorders	Dysfunctional activity of DIS3L2 has been linked to Perlman syndrome a condition characterized by overgrowth and predisposition to Wilms tumor a type of kidney cancer. Studies suggest that DIS3L2 through its RNA degradation role impacts the balance of growth-regulatory factors. Additionally it has been associated with Bloom syndrome a disorder marked by genomic instability. Here the absence or malfunction of DIS3L2 can exacerbate the genomic instability that characterizes Bloom syndrome highlighting its interaction with pathways involving DNA repair proteins.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

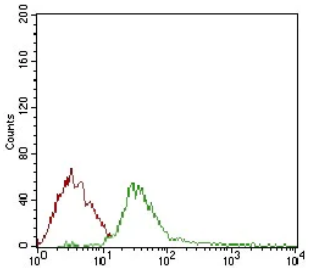
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

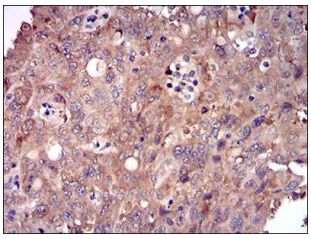
6 product images



Flow Cytometry - Anti-DIS3L2 antibody [6C7B2] (ab181743)

DIS3L2 Flow Cytometry staining using mouse Anti-DIS3L2 antibody

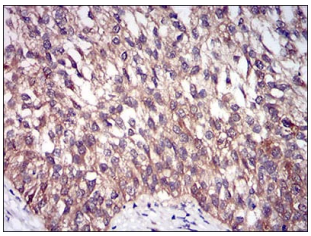
Flow Cytometrical analysis of Jurkat cells labeling DIS3L2 with ab181743 at 1/200 (green) compared to a negative control antibody (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DIS3L2 antibody [6C7B2] (ab181743)

DIS3L2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-DIS3L2 antibody

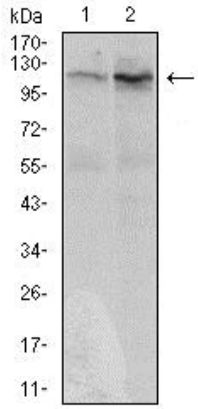
Immunohistochemical analysis of paraffin embedded Human endometrial cancer tissue labeling DIS3L2 with ab181743 at 1/200.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DIS3L2 antibody [6C7B2] (ab181743)

DIS3L2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-DIS3L2 antibody

Immunohistochemical analysis of paraffin embedded Human bladder cancer tissue labeling DIS3L2 with ab181743 at 1/200.



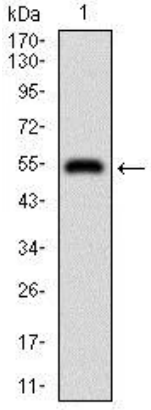
Western blot - Anti-DIS3L2 antibody [6C7B2] (ab181743)

All lanes:
Western blot - Anti-DIS3L2 antibody [6C7B2] (ab181743) at 1/500 dilution

Lane 1:
HeLa cell lysate

Lane 2:
HepG2 cell lysate

Predicted band size: 99 kDa

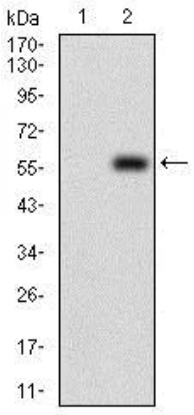


Western blot - Anti-DIS3L2 antibody [6C7B2] (ab181743)

All lanes:
Western blot - Anti-DIS3L2 antibody [6C7B2] (ab181743) at 1/500 dilution

All lanes:
DIS3L2 recombinant protein

Predicted band size: 27 kDa, 68 kDa, 99 kDa



Western blot - Anti-DIS3L2 antibody [6C7B2] (ab181743)

All lanes:
Western blot - Anti-DIS3L2 antibody [6C7B2] (ab181743) at 1/500 dilution

Lane 1:
non-transfected HEK293 cell lysate

Lane 2:
DIS3L2 (aa 27-250)-hIgGFc transfected HEK293 cell lysate

Predicted band size: 99 kDa

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