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DIS3L2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1864a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q8IYB7
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6C7B2
Isotype	IgG1
Calculated MW	99279
Description	The protein encoded by this gene is similar in sequence to 3'/5' exonucleolytic subunits of the RNA exosome. The exosome is a large multimeric ribonucleotide complex responsible for degrading various RNA substrates. Several transcript variants, some protein-coding and some not, have been found for this gene.
Immunogen	Purified recombinant fragment of human DIS3L2 (AA: 27-250) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	129563
Other Names	DIS3-like exonuclease 2 {ECO:0000255|HAMAP-Rule:MF_03045}, hDIS3L2, 3.1.13.- {ECO:0000255|HAMAP-Rule:MF_03045}, DIS3L2 {ECO:0000255|HAMAP-Rule:MF_03045}, FAM6A
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
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	DIS3L2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DIS3L2 {ECO:0000255|HAMAP-Rule:MF_03045}
Synonyms	FAM6A

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.
Cellular Location	Cytoplasm. Cytoplasm, P-body

Background

The protein encoded by this gene belongs to a small class of the protein tyrosine phosphatase (PTP) family. PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. PTPs in this class contain a protein tyrosine phosphatase catalytic domain and a characteristic C-terminal prenylation motif. This PTP has been shown to primarily associate with plasmic and endosomal membrane through its C-terminal prenylation. This PTP was found to interact with the beta-subunit of Rab geranylgeranyltransferase II (beta GGT II), and thus may function as a regulator of GGT II activity. Overexpression of this gene in mammalian cells conferred a transformed phenotype, which suggested its role in tumorigenesis. Alternatively spliced transcript variants have been described. Related pseudogenes exist on chromosomes 11, 12 and 17. ;

References

1. Nat Rev Mol Cell Biol. 2013 Jun;14(6):328. 2. Nat Genet. 2012 Feb 5;44(3):277-84.

Images

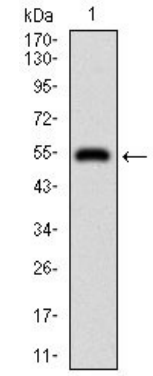


Figure 1: Western blot analysis using DIS3L2 mAb against human DIS3L2 recombinant protein. (Expected MW is 50.2 kDa)

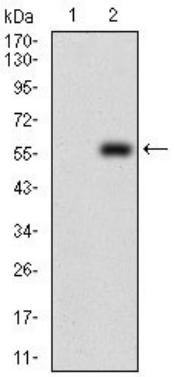
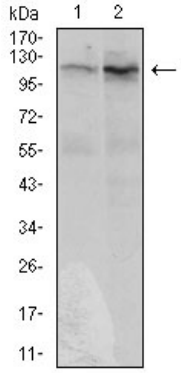


Figure 2: Western blot analysis using DIS3L2 mAb against HEK293 (1) and DIS3L2 (AA: 27-250)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 3: Western blot analysis using DIS3L2 mouse mAb against Hela (1) and HepG2 (2) cell lysate.



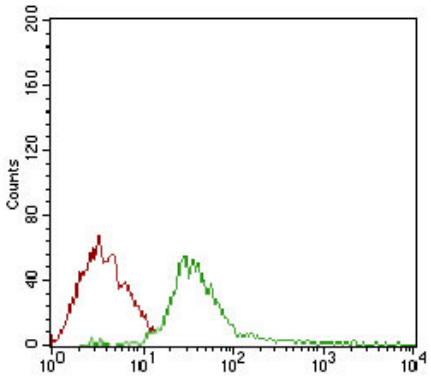


Figure 4: Flow cytometric analysis of Jurkat cells using DIS3L2 mouse mAb (green) and negative control (red).

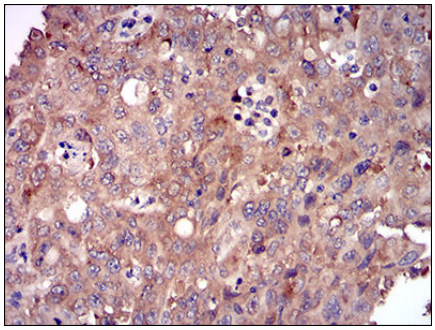


Figure 5: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using DIS3L2 mouse mAb with DAB staining.

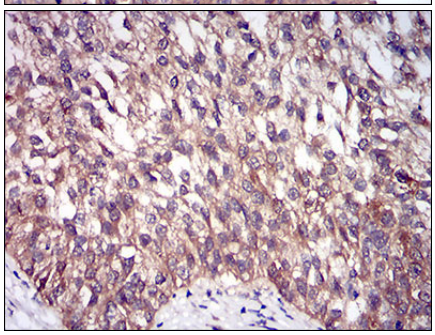


Figure 6: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using DIS3L2 mouse mAb with DAB staining.