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DIS3L2 Antibody
Catalog # ASC11955

Specification

DIS3L2 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q8IYB7
Other Accession	NP_689596, 134288890
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 97 kDa; Observed: 94 kDa KDa**
Application Notes	**DIS3L2 antibody can be used for detection of DIS3L2 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.**

DIS3L2 Antibody - Additional Information

Gene ID **129563**

Target/Specificity
DIS3L2; DIS3L2 antibody is human, mouse and rat reactive. At least three isoforms of DIS3L2 are known to exist; this antibody will only detect the longest isoform. DIS3L2 is predicted to not cross-react with DIS3 or DIS3L.

Reconstitution & Storage
DIS3L2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
DIS3L2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DIS3L2 Antibody - 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

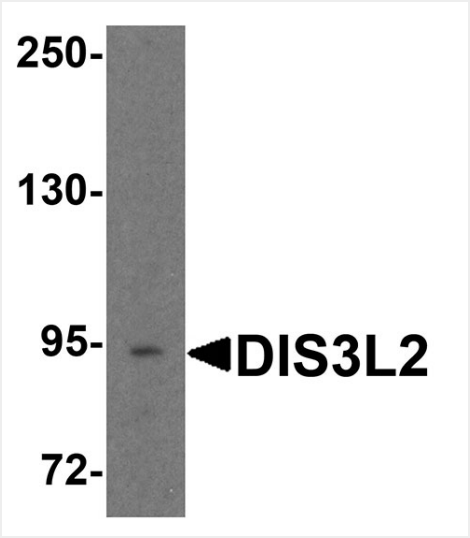
Cytoplasm. Cytoplasm, P-body

DIS3L2 Antibody - Protocols

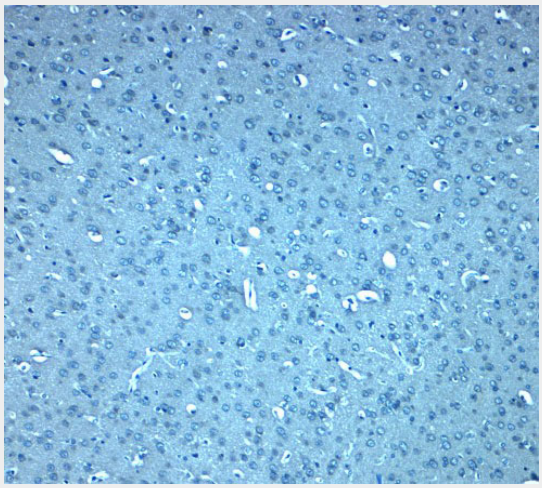
Provided below are standard protocols that you may find useful for product applications.

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

DIS3L2 Antibody - Images



Western blot analysis of DIS3L2 in 3T3 cell lysate with DIS3L2 antibody at 1 µg/ml.



Immunohistochemistry of DIS3L2 in rat brain tissue with DIS3L2 antibody at 5 µg/mL.

DIS3L2 Antibody - Background

The exosome is involved in a multitude of cellular RNA processing and degradation events (1). DIS3, also known as exosome complex exonuclease RRP44, is a ribonuclease that acts directly in the processing, turnover, and surveillance of a large number of distinct RNA species (2). DIS3L2 is a paralog of DIS3, but unlike DIS3 is located in the cytoplasm (3). DIS3L2 defines a novel eukaryotic RNA degradation pathway and preferentially targets uridylated RNA (4). DIS3L2 mutations have also been associated with sporadic Wilms tumors (3).

DIS3L2 Antibody - References

Chen CY, Gherzi R, Ong SE, et al. AU binding proteins recruit the exosome to degrade ARE-containing mRNAs. Cell 2001; 107:451-64.
Brouwer R, Allmang C, Raijmakers R, et al. Three novel components of the human exosome. J. Biol. Chem. 2001; 276:6177-84.
Astuti D, Morris MR, Cooper WN, et al. Germline mutations in DIS3L2 cause the Perlman syndrome of overgrowth and Wilms tumor susceptibility. Nat. Genet. 2012; 44:277-84.
Malecki M, Viegas SC, Carneiro T, et al. The exonuclease Dis3L2 defines a novel eukaryotic RNA degradation pathway. EMBO J. 2013; 32:1842-54.