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Product Information

Anti- DIS3

produced in rabbit, affinity isolated antibody

Catalog Number SAB4200402

Product Description

Anti- DIS3 is produced in rabbit using as immunogen a peptide corresponding to the C-terminal region of human DIS3 (GeneID: 22894), conjugated to KLH. The corresponding sequence is human specific. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti- DIS3 recognizes human DIS3. The antibody may be used in various immunochemical techniques including immunoblotting (~109 kDa) and immunofluorescence. Detection of the DIS3 band by immunoblotting is specifically inhibited by the immunizing peptide.

DIS3 mitotic control homolog, also known as RRP44 and EXOSC11, is a catalytic component of the eukaryotic RNA exosome. The RNA exosome is a ribonucleolytic complex of 400 kDa involved in RNA processing and turnover. It is composed of a ninesubunit catalytically inert core that serves a structural function and participates in substrate recognition, and the associated catalytic subunits EXOSC10, and DIS3 or its homolog DIS3L. The exosome was characterized as a multisubunit complex important for the $3' \rightarrow 5'$ processing and degradation of many types of RNAs, including mRNA, rRNA, snRNA, snoRNA, and tRNA. DIS3 and DIS3L are active exonucleases. DIS3 also displays endonuclease activity. The exosome complex is localized both to the nucleus and the cytoplasm. DIS3 is mainly nuclear, whereas DIS3L is strictly cytoplasmic.1

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

 $\frac{Immunoblotting}{2.5\text{-}5} \ \mu\text{g/mL} \ \text{is recommended using whole extracts of HEK-293 cells}.$

Immunofluorescence: a working concentration of 0.5-1 µg/mL is recommended using human HeLa cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

- Tomecki, R., et al., EMBO J., 29, 2342-2357 (2010).
- 2. Kiss, D.L., et al., RNA, 16, 781-791 (2010).
- Chlebowski, A., et al., Adv. Exp. Med. Biol., 702, 63-78 (2011).
- 4. Tomecki, R., et al., *Chembiochem*, **11**, 938-945 (2010).

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