

Product Information

Monoclonal Anti-LIN28, clone L28.5

produced in mouse, tissue culture supernatant

Catalog Number **SAB4200413**

Product Description

Monoclonal Anti-LIN28 (mouse IgM isotype) is derived from the hybridoma L28.5 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a sequence at the C-terminus of human LIN28A (GeneID: 79727). The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is provided as tissue culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-LIN28 recognizes human and mouse LIN28. The antibody may be used in various immunochemical techniques including immunoblotting (~ 28 kDa) and immunocytochemistry. Staining of the LIN28 band in immunoblotting is specifically inhibited by the immunizing peptide.

Lin28 is an evolutionarily conserved RNA-binding protein that plays important roles in timing of development, pluripotency and oncogenesis. As a multi-functional protein Lin28 acts as a post-transcriptional regulator of the biogenesis of a group of miRNAs. These include the let-7 family miRNAs shown to participate in the regulation of expression of genes involved in cell growth and differentiation. Lin28 binds to the loop regions of miRNA precursors, leading to inhibition of their processing into mature miRNAs, and/or induction of uridylation of the precursors that are subsequently degraded.¹ Nevertheless, Lin28 also exerts biological effects that are independent of let-7 miRNAs.² Lin28 was also found to act as a translational modulator, probably by recruiting RNA helicase A (RHA) as a co-factor to enhance the translation of Lin28 target mRNAs.³

Reagent

The product is supplied as a tissue culture supernatant solution containing 15 mM sodium azide as a preservative. The product contains fetal calf serum.

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 at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, 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

Immunoblotting: a working dilution of 1:8,000-1:16,000 is recommended using extracts of Ntera-2 cells.

Immunofluorescence: a working dilution 1:1,500-1:3,000 is recommended using HeLa cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Viswanathan, S.R., and Daley, G.Q., *Cell*, **140**, 445-449 (2010).
2. Balzer, E., et al., *Development*, **137**, 891-900 (2010).
3. Jin, J., et al., *Nucl. Acids Res.*, **39**, 3724-3734 (2011).

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