

Phospho-LIN28A (Ser200) Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 28	Source/Isotype: Rabbit	UniProt ID: #Q9H9Z2	Entrez-Gene Id: 79727
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Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-LIN28A (Ser200) Antibody recognizes endogenous levels of LIN28A protein only when phosphorylated at Ser200. This antibody may react weakly with phosphorylated Thr202 on LIN28A.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser200 of human LIN28A protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

LIN28A and LIN28B are conserved, developmentally regulated RNA binding proteins that inhibit the processing and maturation of the let-7 family of miRNAs (1,2). The let-7 miRNAs have been implicated in repression of oncogenes such as Ras, Myc, and HMGA2 (3). It has recently been shown that upregulation of LIN28A and LIN28B in primary human tumors and human cancer cell lines is correlated with downregulation of let-7 miRNAs (4). LIN28 genes are reported to be involved in primordial germ cell development and germ cell malignancy (5). In addition, allelic variation in LIN28B is associated with regulating the timing of puberty in humans (6). Overexpression of LIN28A, in conjunction with Oct-4, Sox2, and Nanog, can reprogram human fibroblasts to pluripotent, ES-like cells (7). In high throughput studies phosphorylation of Lin28A on Ser200 was observed upon differentiation of embryonic stem cells (8).

Background References

- Balzer, E. and Moss, E.G. (2007) *RNA Biol* 4, 16-25.
- Piskounova, E. et al. (2008) *J Biol Chem* 283, 21310-4.
- Cho, W.C. (2007) *Mol Cancer* 6, 60.
- Viswanathan, S.R. et al. (2009) *Nat Genet* 41, 843-8.
- West, J.A. et al. (2009) *Nature* 460, 909-13.
- Ong, K.K. et al. (2009) *Nat Genet* 41, 729-33.
- Yu, J. et al. (2007) *Science* 318, 1917-20.
- Van Hoof, D. et al. (2009) *Cell Stem Cell* 5, 214-26.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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