

#3978 Store at -20°C

LIN28A (A177) Antibody



100 µl
 (10 Western mini-blot)

Orders ■ 877-616-CELL (2355)
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rev. 08/19/09

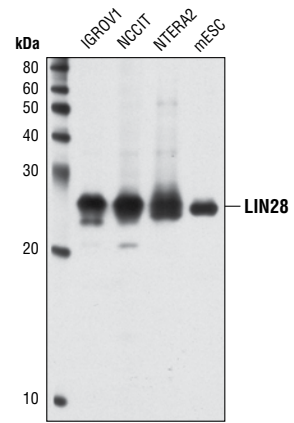
This product is for *in vitro* research use only and is not intended for use in humans or animals.
 This product is not intended for use as a therapeutic or in diagnostic procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IHC-P, IF-IC, F Endogenous	H, M, (Mk)	26 kDa	Rabbit**

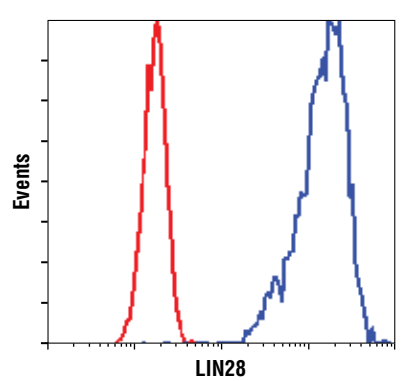
Background: LIN28A and LIN28B are conserved, developmentally regulated RNA binding proteins that inhibit the processing and maturation of the let-7 family of miRNAs (1,2). The let-7 miRNAs have been implicated in repression of oncogenes such as ras, myc and Hmga2 (3). It has recently been shown that LIN28A and LIN28B are upregulated in primary human tumors and in human cancer cell lines, their overexpression directly correlating to downregulation of Let-7 miRNAs (4). LIN28 genes are reported to be involved in primordial germ cell development and germ cell malignancy (5), and 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).

Specificity/Sensitivity: LIN28A (A177) Antibody detects endogenous levels of LIN28A protein.

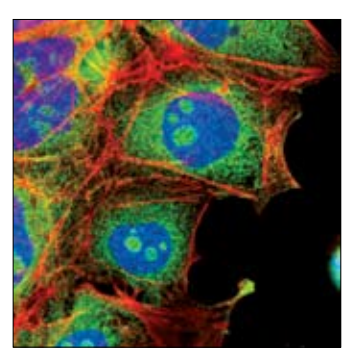
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acid sequence surrounding Ala177 of human LIN28A. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from various cell lines, including mouse embryonic stem cells (mESCs), using LIN28A (A177) Antibody.



Flow cytometric analysis of NCCIT cells using LIN28A (A177) Antibody (blue) compared to a nonspecific negative control antibody (red).



Confocal immunofluorescent analysis of P19 cells using LIN28A (A177) Antibody (green). Actin filaments have been labeled with DY-554 phalloidin (red). Blue pseudocolor = DRAQ5™ (fluorescent DNA dye).

Entrez-Gene ID #79727
Swiss-Prot Acc. #Q9H9Z2

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.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:100
Immunohistochemistry (Paraffin)	1:50
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Immunofluorescence (IF-IC)	1:200
Flow Cytometry	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

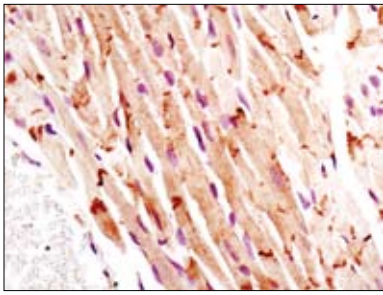
Background References:

- 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*, Epub ahead of print.
- Ong, K.K. et al. (2009) *Nat Genet*, Epub ahead of print.
- Yu, J. et al. (2007) *Science* 318, 1917-20.

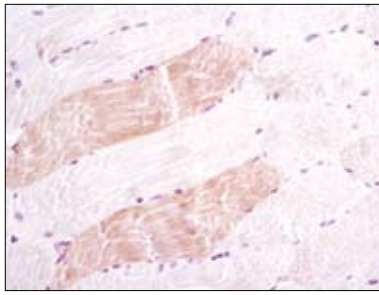
IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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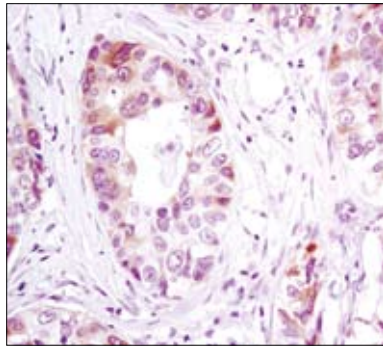
Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae All—all species expected Species enclosed in parentheses are predicted to react based on 100% sequence homology.



Immunohistochemical analysis of paraffin-embedded mouse heart using LIN28A (A177) Antibody.



Immunohistochemical analysis of paraffin-embedded human skeletal muscle using LIN28A (A177) Antibody.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma using LIN28A (A177) Antibody.