

# Reelin (G-20): sc-7741

## BACKGROUND

Reelin (or Reln) is a large glycoprotein that is secreted by Cajal-Retzius cells in the forebrain and by granule neurons in the cerebellum. Reelin was shown to be mutated in "reeler" mice, a mutation that is associated with widespread disruption of laminated regions of the brain, leading to impaired motor coordination, tremors and ataxia. Reelin protein expression is complex and changes throughout development. Reelin appears to function upstream of Dab1, in a signaling pathway that controls cell positioning in the developing brain, and is also thought to be a direct effector of the neurotrophin BDNF.

## REFERENCES

1. D'Arcangelo, G., et al. 1995. A protein related to extracellular matrix proteins deleted in the mouse mutant reeler. *Nature* 374: 719-723.
2. Curran, T., et al. 1998. Role of reelin in the control of brain development. *Brain Res. Brain Res. Rev.* 26: 285-294.
3. Alcantara, S., et al. 1998. Regional and cellular patterns of Reelin mRNA expression in the forebrain of the developing and adult mouse. *J. Neurosci.* 18: 7779-7799.
4. Pesold, C., et al. 1998. Reelin is preferentially expressed in neurons synthesizing  $\gamma$ -aminobutyric acid in cortex and hippocampus of adult rats. *Proc. Natl. Acad. Sci. USA* 95: 3221-3226.
5. Rice, D.S., et al. 1998. Disabled-1 acts downstream of Reelin in a signaling pathway that controls laminar organization in the mammalian brain. *Development* 125: 3719-3729.
6. Ringstedt, T., et al. 1998. BDNF regulates Reelin expression and Cajal-Retzius cell development in the cerebral cortex. *Neuron* 21: 305-315.
7. LocusLink Report (LocusID: 5649). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: RELN (human) mapping to 7q22.1; Reln (mouse) mapping to 5 A3.

## SOURCE

Reelin (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Reelin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7741 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Reelin (G-20) is recommended for detection of Reelin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Reelin (G-20) is also recommended for detection of Reelin in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Reelin siRNA (h): sc-42208, Reelin siRNA (m): sc-42209, Reelin shRNA Plasmid (h): sc-42208-SH, Reelin shRNA Plasmid (m): sc-42209-SH, Reelin shRNA (h) Lentiviral Particles: sc-42208-V and Reelin shRNA (m) Lentiviral Particles: sc-42209-V.

Molecular Weight of full length Reelin: 420 kDa.

Molecular Weight of Reelin cleavage products: 310/180 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, rat brain extract: sc-2392 or IMR-32 cell lysate: sc-2409.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.