

# SRP14 (T-20): sc-17013

## BACKGROUND

Short interspersed elements (SINEs) are ubiquitous repetitive DNAs that occur in the mammalian genome. The progenitor of the most common human SINE, the Alu repeat, may be 7SL RNA, which is a component of the signal recognition particle, SRP. SRP is a ribonucleoprotein complex that mediates the targeting of proteins to the endoplasmic reticulum. The "Alu domain" of SRP comprises the heterodimer of the SRP9 and SRP14 proteins, which are bound to the 5' and 3' terminal sequences of SRP RNA. SRP9/14 binding may be crucial to the transcription, maturation, nucleolus localization and transport of SRP RNA. The genes encoding SRP9 and SRP14 map to chromosomes 1q42.1 and 15q15.1, respectively.

## REFERENCES

1. Chang, D.Y., Nelson, B., Bilyeu, T., Hsu, K., Darlington, G.J. and Maria, R.J. 1994. A human Alu RNA-binding protein whose expression is associated with accumulation of small cytoplasmic Alu RNA. *Mol. Cell. Biol.* 14: 3949-3959.
2. Hsu, K., Chang, D.Y. and Maraia, R.J. 1995. Human signal recognition particle (SRP) Alu-associated protein also binds Alu interspersed repeat sequence RNAs: characterization of human SRP9. *J. Biol. Chem.* 270: 10179-10186.
3. Larsen, N., Samuelsson, T. and Swieb, C. 1998. The signal recognition particle database (SRPDB). *Nucleic Acids Res.* 26: 177-178.
4. Weichenrieder, O., Wild, K., Strub, K. and Cusack, S. 2000. Structure and assembly of the Alu domain of the mammalian signal recognition particle. *Nature* 408: 167-173.

## CHROMOSOMAL LOCATION

Genetic locus: SRP14 (human) mapping to 15q15.1; Srp14 (mouse) mapping to 2 E5.

## SOURCE

SRP14 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SRP14 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17013 P, (100 µg 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.

## PROTOCOLS

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

## APPLICATIONS

SRP14 (T-20) is recommended for detection of SRP14 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

SRP14 (T-20) is also recommended for detection of SRP14 in additional species, including equine, canine, bovine, porcine and avian.

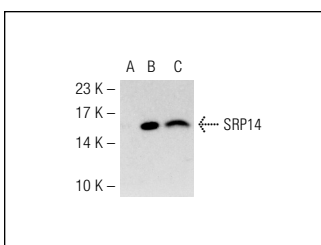
Suitable for use as control antibody for SRP14 siRNA (h): sc-41361, SRP14 siRNA (m): sc-41362, SRP14 shRNA Plasmid (h): sc-41361-SH, SRP14 shRNA Plasmid (m): sc-41362-SH, SRP14 shRNA (h) Lentiviral Particles: sc-41361-V and SRP14 shRNA (m) Lentiviral Particles: sc-41362-V.

Molecular Weight (predicted) of SRP14: 14 kDa.

Molecular Weight (observed) of SRP14: 16 kDa.

Positive Controls: SRP14 (h): 293T Lysate: sc-117379 or K-562 whole cell lysate: sc-2203.

## DATA



SRP14 (T-20): sc-17013. Western blot analysis of SRP14 expression in non-transfected 293T: sc-117752 (A), human SRP14 transfected 293T: sc-117379 (B) and K-562 (C) whole cell lysates.

## RESEARCH USE

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



Try **SRP14 (B-3): sc-377012** or **SRP14 (H-11): sc-377007**, our highly recommended monoclonal alternatives to SRP14 (T-20).