

STRAP (h): 293 Lysate: sc-110599

BACKGROUND

Smad proteins play an important role in the intracellular signalling of the TGF β superfamily of extracellular polypeptides. Two Smad proteins, Smad6 and Smad7, function as antagonists to TGF β signalling. STRAP, another antagonist to the TGF β signalling pathway, specifically interacts with Smad7, but not Smad6, to synergistically block TGF β -induced transcriptional activation. The gene encoding the human homolog of STRAP (as designated in mouse), called unr-interacting protein, maps to chromosome 12p12.3. Unr-interacting protein is 97% homologous to STRAP at the amino acid level. The unr-interacting protein binds unr, a cytoplasmic RNA-binding protein with five cold-shock domains that is involved in RNA translation. The presence of the STRAP gene in a variety of species from mammals to yeast, indicates that STRAP function is evolutionarily conserved in eukaryotic cells.

REFERENCES

1. Datta, P.K., Chytil, A., Gorska, A.E. and Moses, H.L. 1998. Identification of STRAP, a novel WD domain protein in transforming growth factor β signaling. *J. Biol. Chem.* 273: 34671-34674.
2. Hunt, S.L., Hsuan, J.J., Totty, N. and Jackson, R.J. 1999. UNR, a cellular cytoplasmic RNA-binding protein with five cold-shock domains, is required for internal initiation of translation of human rhinovirus RNA. *Genes Dev.* 13: 437-448.
3. Datta, P.K. and Moses, H.L. 2000. STRAP and Smad7 synergize in the inhibition of transforming growth factor β signaling. *Mol. Cell. Biol.* 20: 3157-3167.
4. Zhao, J., Shi, W., Chen, H. and Warburton, D. 2000. Smad7 and Smad6 differentially modulate transforming growth factor β induced inhibition of embryonic lung morphogenesis. *J. Biol. Chem.* 275: 23992-23997.
5. LocusLink Report (LocusID: 11171). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: STRAP (human) mapping to 12p12.3.

PRODUCT

STRAP (h): 293 Lysate represents a lysate of human STRAP transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

STRAP (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive STRAP antibodies. Recommended use: 10-20 μ l per lane.

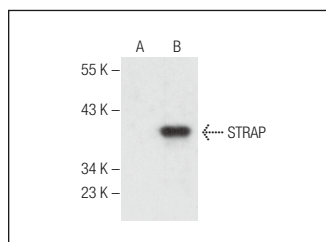
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

STRAP (E-8): sc-377345 is recommended as a positive control antibody for Western Blot analysis of enhanced human STRAP expression in STRAP transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



STRAP (E-8): sc-377345. Western blot analysis of STRAP expression in non-transfected: sc-110760 (A) and human STRAP transfected: sc-110599 (B) 293 whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.