

STRAP (H-116): sc-292605

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

- 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.
- 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.
- 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.
- 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.
- LocusLink Report (LocusID: 11171). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: STRAP (human) mapping to 12p12.3; Strap (mouse) mapping to 6 G1.

SOURCE

STRAP (H-116) is a rabbit polyclonal antibody raised against amino acids 1-116 mapping at the N-terminus of STRAP of human origin.

PRODUCT

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

STORAGE

Store at 4 $^{\circ}$ 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 or our catalog for detailed protocols and support products.

APPLICATIONS

STRAP (H-116) is recommended for detection of STRAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

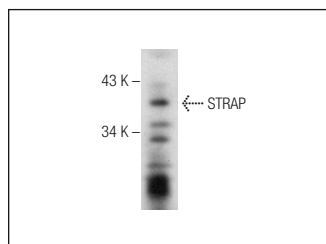
STRAP (H-116) is also recommended for detection of STRAP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for STRAP siRNA (h): sc-44129, STRAP siRNA (m): sc-153911, STRAP shRNA Plasmid (h): sc-44129-SH, STRAP shRNA Plasmid (m): sc-153911-SH, STRAP shRNA (h) Lentiviral Particles: sc-44129-V and STRAP shRNA (m) Lentiviral Particles: sc-153911-V.

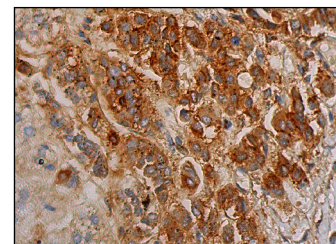
Molecular Weight of STRAP: 39 kDa.

Positive Controls: ES-2 cell lysate: sc-24674, HeLa whole cell lysate: sc-2200 or rat brain extract: sc-2392.

DATA



STRAP (H-116): sc-292605. Western blot analysis of STRAP expression in rat brain tissue extract.



STRAP (H-116): sc-292605. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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



Try **STRAP (E-8): sc-377345** or **STRAP (3G6): sc-130671**, our highly recommended monoclonal alternatives to STRAP (H-116).