

UTY (S-20): sc-83947



The Power to Question

BACKGROUND

Tup1 and Ssn6 are yeast proteins that, after being recruited to different promoter regions by DNA-binding proteins, form a transcription repressor complex that regulates gene expression. The groucho/transducin-like Enhancer of split (TLE) family is the vertebrate ortholog of the Tup family and is functionally paired with the vertebrate Ssn6-like protein UTY. UTY is a product of the ubiquitously transcribed tetratricopeptide-repeat genes found on the Y chromosome. Interacting with TLE1 or TLE2, UTY acts to regulate the expression of particular genes. A related gene, found on the X chromosome, encodes the UTX protein that functions in a similar manner.

REFERENCES

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2. Grbavec, D., et al. 1998. Transducin-like enhancer of split 2, a mammalian homologue of *Drosophila* groucho, acts as a transcriptional repressor, interacts with Hairy/enhancer of split proteins, and is expressed during neuronal development. *Eur. J. Biochem.* 258: 339-349.
3. Grbavec, D., et al. 1999. Groucho/transducin-like enhancer of split (TLE) family members interact with the yeast transcriptional co-repressor Ssn6 and mammalian Ssn6-related proteins: implications for evolutionary conservation of transcription repression mechanisms. *Biochem. J.* 337: 13-17.
4. Mennella, T.A., et al. 2003. Recruitment of Tup1-Ssn6 by yeast hypoxic genes and chromatin-independent exclusion of TATA binding protein. *Eukaryotic Cell* 2: 1288-1303.
5. Malavé, T.M., et al. 2006. Transcriptional repression by Tup1-Ssn6. *Biochem. Cell Biol.* 84: 437-443.
6. Bernard, S., et al. 2006. Modelling transcriptional feedback loops: the role of Gro/TLE1 in HES1 oscillations. *Philos. Transact. A Math. Phys. Eng. Sci.* 364: 1155-1170.
7. Terry, J., et al. 2007. TLE1 as a diagnostic immunohistochemical marker for synovial sarcoma emerging from gene expression profiling studies. *Am. J. Surg. Pathol.* 31: 240-246.

CHROMOSOMAL LOCATION

Genetic locus: UTY (human) mapping to Yq11.221.

SOURCE

UTY (S-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of UTY of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83947 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

UTY (S-20) is recommended for detection of UTY of 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).

Suitable for use as control antibody for UTY siRNA (h): sc-91538, UTY shRNA Plasmid (h): sc-91538-SH and UTY shRNA (h) Lentiviral Particles: sc-91538-V.

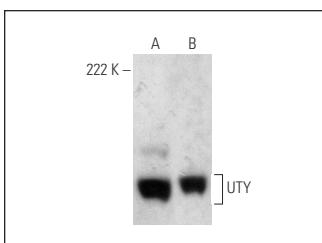
Molecular Weight of UTY: 150 kDa.

Positive Controls: UTY (h): 293T Lysate: sc-158072, HeLa nuclear extract: sc-2120 or K-562 nuclear extract: sc-2130.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



UTY (S-20): sc-83947. Western blot analysis of UTY expression in HeLa (A) and K-562 (B) nuclear extracts.

STORAGE

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



Try **UTY (G-3): sc-514690**, our highly recommended monoclonal alternative to UTY (S-20).