

UTY (G-3): sc-514690



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

1. Redd, M.J., et al. 1997. A complex composed of Tup1 and Ssn6 represses transcription *in vitro*. *J. Biol. Chem.* 272: 11193-11197.
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. *Eukaryot. Cell* 2: 1288-1303.

CHROMOSOMAL LOCATION

Genetic locus: UTY (human) mapping to Yq11.221; Uty (mouse) mapping to Y A1.

SOURCE

UTY (G-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 599-616 within an internal region of UTY of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

UTY (G-3) is available conjugated to agarose (sc-514690 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514690 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514690 PE), fluorescein (sc-514690 FITC), Alexa Fluor® 488 (sc-514690 AF488), Alexa Fluor® 546 (sc-514690 AF546), Alexa Fluor® 594 (sc-514690 AF594) or Alexa Fluor® 647 (sc-514690 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514690 AF680) or Alexa Fluor® 790 (sc-514690 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514690 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

UTY (G-3) is recommended for detection of UTY of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 siRNA (m): sc-154961, UTY shRNA Plasmid (h): sc-91538-SH, UTY shRNA Plasmid (m): sc-154961-SH, UTY shRNA (h) Lentiviral Particles: sc-91538-V and UTY shRNA (m) Lentiviral Particles: sc-154961-V.

Molecular Weight of UTY: 150 kDa.

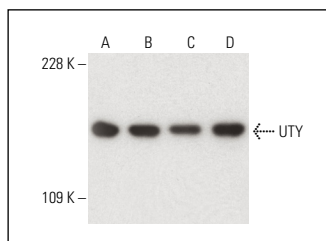
Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

RECOMMENDED SUPPORT REAGENTS

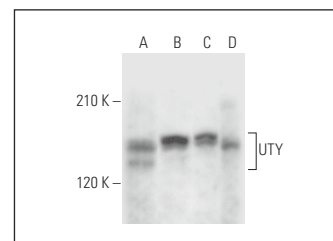
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



UTY (G-3) HRP: sc-514690 HRP. Direct western blot analysis of UTY expression in Sol8 (A), HeLa (C) and MCF7 (D) nuclear extracts and WEHI-231 whole cell lysate (B).



UTY (G-3): sc-514690. Western blot analysis of UTY expression in K-562 (A), HeLa (B), MCF7 (C) and Jurkat (D) nuclear extracts.

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.

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