SANTA CRUZ BIOTECHNOLOGY, INC.

UTP6 (E-9): sc-398913

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

UTP6 (U3 small nucleolar RNA-associated protein 6 homolog), also known as C17orf40, HCA66 (hepatocellular carcinoma-associated antigen 66) or MHAT (multiple hat domains protein), is a 597 amino acid protein that belongs to the UTP6 family and contains five half-a-tetratricopeptide (HAT) repeats. HAT repeats are found only in proteins involved in RNA metabolism, and may be required for pre-rRNA processing. UTP6 is involved in nucleolar processing of pre-18S ribosomal RNA, and is localized to the nucleus. The gene encoding UTP6 maps to human chromosome 17, which makes up over 2.5% of the human genome with approximately 81 million bases encoding over 1,200 genes.

REFERENCES

1. Jenne, D.E., et al. 2000. A common set of at least 11 functional genes is lost in the majority of NF1 patients with gross deletions. Genomics 66: 93-97.
2. Wang, Y., et al. 2002. Large scale identification of human hepatocellular carcinoma-associated antigens by autoantibodies. J. Immunol. 169: 1102-1109.
3. Dosil, M. and Bustelo, X.R. 2004. Functional characterization of Pwp2, a WD family protein essential for the assembly of the 90 S pre-ribosomal particle. J. Biol. Chem. 279: 37385-37397.
4. Champion, E.A., et al. 2008. A direct interaction between the UTP6 half-a-tetratricopeptide repeat domain and a specific peptide in Utp21 is essential for efficient pre-rRNA processing. Mol. Cell. Biol. 28: 6547-6556.

CHROMOSOMAL LOCATION

Genetic locus: UTP6 (human) mapping to 17q11.2; Utp6 (mouse) mapping to 11 B5.

SOURCE

UTP6 (E-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 390-411 within an internal region of UTP6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

UTP6 (E-9) is available conjugated to agarose (sc-398913 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398913 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398913 PE), fluorescein (sc-398913 FITC), Alexa Fluor® 488 (sc-398913 AF488), Alexa Fluor® 546 (sc-398913 AF546), Alexa Fluor® 594 (sc-398913 AF594) or Alexa Fluor® 647 (sc-398913 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398913 AF680) or Alexa Fluor® 790 (sc-398913 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398913 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

UTP6 (E-9) is recommended for detection of UTP6 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 UTP6 siRNA (h): sc-94182, UTP6 siRNA (m): sc-154960, UTP6 shRNA Plasmid (h): sc-94182-SH, UTP6 shRNA Plasmid (m): sc-154960-SH, UTP6 shRNA (h) Lentiviral Particles: sc-94182-V and UTP6 shRNA (m) Lentiviral Particles: sc-154960-V.

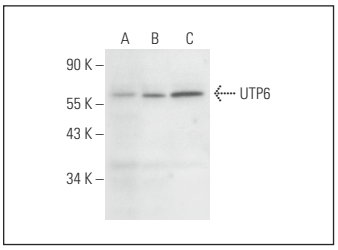
Molecular Weight of UTP6: 70 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or HCT-116 whole cell lysate: sc-364175.

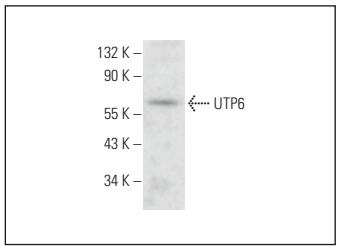
RECOMMENDED SUPPORT REAGENTS

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



UTP6 (E-9): sc-398913. Western blot analysis of UTP6 expression in HeLa (**A**), Jurkat (**B**) and HCT-116 (**C**) whole cell lysates.



UTP6 (E-9): sc-398913. Western blot analysis of UTP6 expression in RAW 264.7 whole cell lysate.

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.

PROTOCOLS

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