# SANTA CRUZ BIOTECHNOLOGY, INC.

# TRIP13 (H-25): sc-134125



The Power to Question

## BACKGROUND

Thyroid hormone receptors (TRs) are transcription factors that regulate the expression of specific genes in a hormone-dependent manner. TRIP13 (thyroid hormone receptor interactor 13), also called 16E1BP, is a transcription factor that interacts with the ligand binding domain of the thyroid receptor (TR) as well as a variety of target genes including human papilloma virus type 16 (HPV16) E1. Unlike most TRIP proteins which function only in the presence of hormones, TRIP13 does not require the presence of thyroid hormone to interact with TR. The association of TRIP13 with (HPV16) E1 suggests that TRIP13 may have tumor suppressor gene function. TRIP13 is a 432 amino acid protein with two different isoforms produced by alternative splicing.

## REFERENCES

- Lee, J.W., Choi, H.S., Gyuris, J., Brent, R. and Moore, D.D. 1995. Two classes of proteins dependent on either the presence or absence of thyroid hormone for interaction with the thyroid hormone receptor. Mol. Endocrinol. 9: 243-254.
- Yasugi, T., Vidal, M., Sakai, H., Howley, P.M. and Benson, J.D. 1997. Two classes of human papillomavirus type 16 E1 mutants suggest pleiotropic conformational constraints affecting E1 multimerization, E2 interaction, and interaction with cellular proteins. J. Virol. 71: 5942-5951.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604507. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Arias-Pulido, H., Narayan, G., Vargas, H., Mansukhani, M. and Murty, V.V. 2004. Mapping common deleted regions on 5p15 in cervical carcinoma and their occurrence in precancerous lesions. Mol. Cancer 1: 3.
- 5. Li, X.C. and Schimenti, J.C. 2007. Mouse pachytene checkpoint 2 (TRIP13) is required for completing meiotic recombination but not synapsis. PLoS Genet. 3: e130.

#### CHROMOSOMAL LOCATION

Genetic locus: TRIP13 (human) mapping to 5p15.33.

## SOURCE

TRIP13 (H-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic TRIP13 peptide of human origin.

## PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## **STORAGE**

Store at 4° 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**

TRIP13 (H-25) is recommended for detection of TRIP13 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TRIP13 siRNA (h): sc-91672, TRIP13 shRNA Plasmid (h): sc-91672-SH and TRIP13 shRNA (h) Lentiviral Particles: sc-91672-V.

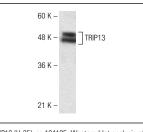
Molecular Weight of TRIP13: 49 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## **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).

#### DATA



TRIP13 (H-25): sc-134125. Western blot analysis of TRIP13 expression in Jurkat whole cell lysate.

#### **RESEARCH USE**

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