# TRIP13 (E-12): sc-107308



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**

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- 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.
- 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; Trip13 (mouse) mapping to 13 C1.

## **SOURCE**

TRIP13 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRIP13 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107308 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

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

#### **APPLICATIONS**

TRIP13 (E-12) is recommended for detection of TRIP13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with family members TRIP6, TRIP12 or TRIP15.

TRIP13 (E-12) is also recommended for detection of TRIP13 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRIP13 siRNA (h): sc-91672, TRIP13 siRNA (m): sc-154679, TRIP13 shRNA Plasmid (h): sc-91672-SH, TRIP13 shRNA Plasmid (m): sc-154679-SH, TRIP13 shRNA (h) Lentiviral Particles: sc-91672-V and TRIP13 shRNA (m) Lentiviral Particles: sc-154679-V.

Molecular Weight of TRIP13: 49 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **RESEARCH USE**

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

### **PROTOCOLS**

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

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