# SERTAD2 (B-22): sc-133992



The Power to Question

## **BACKGROUND**

SERTAD2 (SERTA domain containing 2), also known as Sei-2 or TRIP-Br2, is a 314 amino acid protein that contains one SERTA domain and functions to integrate the signals provided by transcription factors at E2F-responsive promoters, thereby enhancing the effect of select transcription factors on DNA. Overexpression of SERTAD2 is thought to promote carcinogenesis, suggesting a role for SERTAD2 in tumor formation and metastasis. The gene encoding SERTAD2 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which also maps to chromosome 2.

# **REFERENCES**

- Nagase, T., Seki, N., Tanaka, A., Ishikawa, K. and Nomura, N. 1995. Prediction of the coding sequences of unidentified human genes. IV. The coding sequences of 40 new genes (KIAA0121-KIAA0160) deduced by analysis of cDNA clones from human cell line KG-1. DNA Res. 2: 167-174, 199.
- Hsu, S.I., Yang, C.M., Sim, K.G., Hentschel, D.M., O'Leary, E. and Bonventre, J.V. 2001. TRIP-Br: a novel family of PHD zinc finger- and bromodomaininteracting proteins that regulate the transcriptional activity of E2F-1/DP-1. EMBO J. 20: 2273-2285.
- Sim, K.G., Zang, Z., Yang, C.M., Bonventre, J.V. and Hsu, S.I. 2004. TRIP-Br links E2F to novel functions in the regulation of cyclin E expression during cell cycle progression and in the maintenance of genomic stability. Cell Cycle 3: 1296-1304.
- Watanabe-Fukunaga, R., Iida, S., Shimizu, Y., Nagata, S. and Fukunaga, R. 2005. SEI family of nuclear factors regulates p53-dependent transcriptional activation. Genes Cells 10: 851-860.
- 5. Lai, I.L., Wang, S.Y., Yao, Y.L. and Yang, W.M. 2007. Transcriptional and subcellular regulation of the TRIP-Br family. Gene 388: 102-109.
- Cheong, J.K., Gunaratnam, L. and Hsu, S.I. 2008. CRM1-mediated nuclear export is required for 26S Proteasome-dependent degradation of the TRIP-Br2 proto-oncoprotein. J. Biol. Chem. 283: 11661-11676.
- Cheong, J.K., Gunaratnam, L., Zang, Z.J., Yang, C.M., Sun, X., Nasr, S.L., Sim, K.G., Peh, B.K., Rashid, S.B., Bonventre, J.V., Salto-Tellez, M. and Hsu, S.I. 2009. TRIP-Br2 promotes oncogenesis in nude mice and is frequently overexpressed in multiple human tumors. J. Transl. Med. 7: 8.

## CHROMOSOMAL LOCATION

Genetic locus: SERTAD2 (human) mapping to 2p14; Sertad2 (mouse) mapping to 11 A3.1.

# SOURCE

SERTAD2 (B-22) is an affinity purified rabbit polyclonal antibody raised against synthetic SERTAD2 peptide of human origin.

#### **PRODUCT**

Each vial contains 50  $\mu g$  lgG in 500  $\mu l$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

# **APPLICATIONS**

SERTAD2 (B-22) is recommended for detection of SERTAD2 of mouse, rat and 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 SERTAD2 siRNA (h): sc-94398, SERTAD2 siRNA (m): sc-153377, SERTAD2 shRNA Plasmid (h): sc-94398-SH, SERTAD2 shRNA Plasmid (m): sc-153377-SH, SERTAD2 shRNA (h) Lentiviral Particles: sc-94398-V and SERTAD2 shRNA (m) Lentiviral Particles: sc-153377-V.

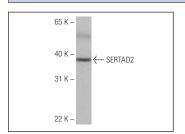
Molecular Weight of SERTAD2: 34 kDa.

Positive Controls: human fetal liver tissue extract.

#### **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**



SERTAD2 (B-22): sc-133992. Western blot analysis of SERTAD2 expression in human fetal liver tissue extract.

#### **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 or our catalog for detailed protocols and support products.