

SERTAD3 (E-14): sc-161215

BACKGROUND

SERTAD3 (SERTA domain containing 3), also known as RBT1 or replication protein-binding trans-activator (RPA-binding trans-activator), is a 196 amino acid nuclear protein that functions as a transcriptional coactivator and interacts with RPA 32. Like other members of the SERTAD family, SERTAD3 contains a SERTA domain, N-terminal cyclin A-binding motif, PHD-bromo interacting domain and a C-terminal activation domain. Through an E2-F dependent mechanism, SERTAD3 participates in oncogenesis, and is encoded by a gene that maps to human chromosome 19q13.2. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

- Olsen, A., et al. 1994. Gene organization of the pregnancy-specific glycoprotein region on human chromosome 19: assembly and analysis of a 700-kb cosmid contig spanning the region. *Genomics* 23: 659-668.
- Wang, L., et al. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. *Clin. Cancer Res.* 6: 2988-2993.
- Cho, J.M., et al. 2000. RBT1, a novel transcriptional co-activator, binds the second subunit of replication protein A. *Nucleic Acids Res.* 28: 3478-3485.
- Hsu, S.I., et al. 2001. TRIP-Br: a novel family of PHD zinc finger- and bromodomain-interacting proteins that regulate the transcriptional activity of E2-1F-1/DP-1. *EMBO J.* 20: 2273-2285.
- Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
- Leeb, T. and Müller, M. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. *Gene* 343: 239-244.
- Watanabe-Fukunaga, R., et al. 2005. SEI family of nuclear factors regulates p53-dependent transcriptional activation. *Genes Cells* 10: 851-860.
- Darwish, H., et al. 2007. Overexpression of SERTAD3, a putative oncogene located within the 19q13 amplicon, induces E2F activity and promotes tumor growth. *Oncogene* 26: 4319-4328.

CHROMOSOMAL LOCATION

Genetic locus: SERTAD3 (human) mapping to 19q13.2; Sertad3 (mouse) mapping to 7 A3.

SOURCE

SERTAD3 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SERTAD3 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161215 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SERTAD3 (E-14) is recommended for detection of SERTAD3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with SERTAD2 or SERTAD4.

SERTAD3 (E-14) is also recommended for detection of SERTAD3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SERTAD3 siRNA (h): sc-97275, SERTAD3 siRNA (m): sc-153378, SERTAD3 shRNA Plasmid (h): sc-97275-SH, SERTAD3 shRNA Plasmid (m): sc-153378-SH, SERTAD3 shRNA (h) Lentiviral Particles: sc-97275-V and SERTAD3 shRNA (m) Lentiviral Particles: sc-153378-V.

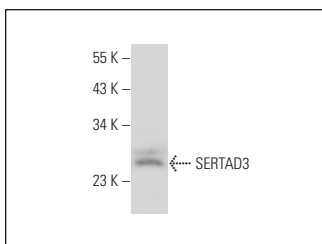
Molecular Weight of SERTAD3: 22 kDa.

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 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SERTAD3 (E-14): sc-161215. Western blot analysis of SERTAD3 expression in Jurkat whole cell lysate.

RESEARCH USE

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