

SEI-1 (H-70): sc-135012

BACKGROUND

SEI-1, also known as SERTAD1 (SERTA domain containing 1) or TRIP-Br1 (transcriptional regulator interacting with the PHD-bromodomain 1), is a transcriptional regulator that integrates signals provided by transcription factors. Acting at E2F-responsive promoters, SEI-1 interacts with the PHD- and bromodomains of proteins such as TIF1 and DP-1, thereby transmitting their signals to the promoter and stimulating transcriptional activity. SEI-1 exists as a multiprotein complex with E2F-1 and DP-1 and is expressed at different levels throughout the cell cycle, allowing it to regulate cell cycle progression via promoter control during the G₁ and S phases. Additionally, SEI-1 can render the activity of the cyclin D-Cdk4 complex, an important catalyst of the cell cycle, resistant to the inhibitory effects of p16. Over-expression of SEI-1 is implicated in the development of squamous cell carcinomas of the head and neck.

REFERENCES

- 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 E2F-1/DP-1. *EMBO J.* 20: 2273-2285.
- Tang, T.C., et al. 2002. Identification of a candidate oncogene SEI-1 within a minimal amplified region at 19q13.1 in ovarian cancer cell lines. *Cancer Res.* 62: 7157-7161.
- Sim, K.G., et al. 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.
- Tang, D.J., et al. 2005. Oncogenic transformation by SEI-1 is associated with chromosomal instability. *Cancer Res.* 65: 6504-6508.
- Watanabe-Fukunaga, R., et al. 2005. SEI family of nuclear factors regulates p53-dependent transcriptional activation. *Genes Cells* 10: 851-860.
- Bott, S.R., et al. 2005. p21WAF1/CIP1 gene is inactivated in metastatic prostatic cancer cell lines by promoter methylation. *Prostate Cancer Prostatic Dis.* 8: 321-326.

CHROMOSOMAL LOCATION

Genetic locus: SERTAD1 (human) mapping to 19q13.2; Sertad1 (mouse) mapping to 7 A3.

SOURCE

SEI-1 (H-70) is a rabbit polyclonal antibody raised against amino acids 16-85 mapping within an internal region of SEI-1 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

SEI-1 (H-70) is recommended for detection of SEI-1 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).

Suitable for use as control antibody for SEI-1 siRNA (h): sc-62988, SEI-1 siRNA (m): sc-62989, SEI-1 shRNA Plasmid (h): sc-62988-SH, SEI-1 shRNA Plasmid (m): sc-62989-SH, SEI-1 shRNA (h) Lentiviral Particles: sc-62988-V and SEI-1 shRNA (m) Lentiviral Particles: sc-62989-V.

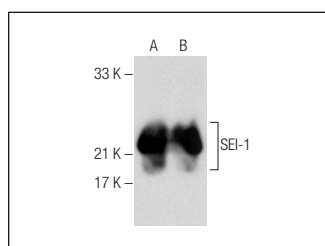
Molecular Weight of SEI-1: 25 kDa.

Positive Controls: mouse small intestine tissue extract or rat small intestine 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SEI-1 (H-70): sc-135012. Western blot analysis of SEI-1 expression in mouse small intestine (A) and rat small intestine (B) tissue extracts.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try **SEI-1 (3H4): sc-517080**, our highly recommended monoclonal alternative to SEI-1 (H-70).