

SUZ12 (G-18): sc-46263

BACKGROUND

The Polycomb group (PcG) genes contribute to the maintenance of cell identity, cell cycle regulation and oncogenesis. The mammalian PcG proteins are regulatory proteins important for Hox gene expression, axial skeleton development and the control of proliferation and survival of hematopoietic cells. By inducing changes in chromatin structure, the PcG proteins are part of a cellular memory system that is responsible for gene activity being inherited to progeny cells. PcG proteins silence gene expression through the formation of multimeric protein complexes with different compositions. Manipulating the expression-levels of various PcG proteins in mammalian cell lines results in cellular transformation, which may be a link between the chromatin-associated PcG proteins and cancer. Polycomb protein SUZ12, also designated ChET 9 protein or Joined to JAZF1 protein, is a nuclear protein belonging to the VEFS (VRN2-EMF2-FIS2-SUZ12) family. The gene maps to chromosome 17q11.2. SUZ12 has been detected at the breakpoints of a certain recurrent chromosomal translocation which has been reported in endometrial stromal sarcoma. It is a component of the PRC2 complex, composed of EED, EZH2, SUZ12/JJAZ1, RBBP4 and RBBP7.

REFERENCES

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- Kuzmichev, A., et al. 2002. Histone methyltransferase activity associated with a human multiprotein complex containing the Enhancer of Zeste protein. *Genes Dev.* 16: 2893-2905.
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CHROMOSOMAL LOCATION

Genetic locus: SUZ12 (human) mapping to 17q11.2; Suz12 (mouse) mapping to 11 B5.

SOURCE

SUZ12 (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SUZ12 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-46263 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SUZ12 (G-18) is recommended for detection of SUZ12 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).

SUZ12 (G-18) is also recommended for detection of SUZ12 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SUZ12 siRNA (h): sc-45597, SUZ12 siRNA (m): sc-45598, SUZ12 shRNA Plasmid (h): sc-45597-SH, SUZ12 shRNA Plasmid (m): sc-45598-SH, SUZ12 shRNA (h) Lentiviral Particles: sc-45597-V and SUZ12 shRNA (m) Lentiviral Particles: sc-45598-V.

Molecular Weight of SUZ12: 93 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) or donkey anti-goat IgG-TR: sc-2783 (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.



Try **SUZ12 (D-10): sc-271325**, our highly recommended monoclonal alternative to SUZ12 (G-18).