

SUV3 (K-13): sc-107091

BACKGROUND

SUV3, also known as SUPV3L1 (suppressor of var1, 3-like 1), is a 786 amino acid protein that localizes to both the nucleus and the mitochondrial matrix and contains one helicase C-terminal domain, as well as one helicase ATP-binding domain. Expressed in a broad range of tissues, SUV3 interacts with HBXIP and functions as an ATPase DNA/RNA helicase that uses magnesium as a cofactor to catalyze the unwinding of DNA/RNA and RNA/RNA duplexes, thereby playing a role in DNA replication and transcriptional initiation. SUV3 exhibits optimal activity at a pH of 5 and, in addition to its helicase activity, is thought to protect cells from apoptosis and participate in maintaining mitochondrial homeostasis. The gene encoding SUV3 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SUPV3L1 (human) mapping to 10q22.1; Supv311 (mouse) mapping to 10 B4.

RESEARCH USE

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

SOURCE

SUV3 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SUV3 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-107091 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-107091 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SUV3 (K-13) is recommended for detection of SUV3 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).

SUV3 (K-13) is also recommended for detection of SUV3 in additional species, including porcine.

Suitable for use as control antibody for SUV3 siRNA (h): sc-90749, SUV3 siRNA (m): sc-153943, SUV3 shRNA Plasmid (h): sc-90749-SH, SUV3 shRNA Plasmid (m): sc-153943-SH, SUV3 shRNA (h) Lentiviral Particles: sc-90749-V and SUV3 shRNA (m) Lentiviral Particles: sc-153943-V.

SUV3 (K-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SUV3: 87 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.

STORAGE

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



Try **SUV3 (E-1): sc-365750**, our highly recommended monoclonal alternative to SUV3 (K-13).