# SUV420H2 (E-13): sc-131076



The Power to Question

#### **BACKGROUND**

SUV420H2 (suppressor of variegation 4-20 homolog 2), also known as KMT5C, is a 462 amino acid nuclear protein that is associated with pericentric heterochromatin in the nucleus. One of several members of the histone-lysine methyltransferase family, SUV420H2 functions as a histone methyltransferase that trimethylates the Lys-20 residue of Histone H4, thereby tagging H4 for transcriptional repression. The co-localization of SUV420H2 with pericentric heterochromatin allows the methyltransferase to play a key role in the establishment of constitutive heterochromatin, further implicating SUV420H2 as a regulator of transcriptional events. Characteristic of most histone methyltransferases, SUV420H2 contains one SET domain through which it confers its enzymatic activity. Three isoforms of SUV420H2 are expressed due to alternative splicing events.

# **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: SUV420H2 (human) mapping to 19q13.42; Suv420h2 (mouse) mapping to 7 A1.

### **RESEARCH USE**

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

#### **SOURCE**

SUV420H2 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SUV420H2 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131076 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

SUV420H2 (E-13) is recommended for detection of SUV420H2 isoforms 1 and 2 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); non cross-reactive with SUV420H2-3.

SUV420H2 (E-13) is also recommended for detection of SUV420H2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for SUV420H2 siRNA (h): sc-97240, SUV420H2 siRNA (m): sc-153946, SUV420H2 shRNA Plasmid (h): sc-97240-SH, SUV420H2 shRNA Plasmid (m): sc-153946-SH, SUV420H2 shRNA (h) Lentiviral Particles: sc-97240-V and SUV420H2 shRNA (m) Lentiviral Particles: sc-153946-V.

Molecular Weight of SUV420H2: 52 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.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.