

SMYD3 (h2): 293T Lysate: sc-173215

BACKGROUND

SET and MYND domain-containing 3 (SMYD3), a 428 amino acid protein, is a member of an RNA polymerase complex and plays a role in transcriptional regulation. SMYD3 methylates Lys 4 of Histone H3, a specific tag for epigenetic transcriptional activation. The SMYD3 protein contains an N-terminal MYND-type zinc finger domain, followed by a SET domain, which shows methyltransferase activity. The presence of the heat shock protein HSP 90 α greatly enhances the methyltransferase activity of SMYD3. SMYD3 is expressed in testis and skeletal muscles and is overexpressed in a majority of colorectal carcinomas (CRCs), hepatocellular carcinomas (HCCs) and breast carcinomas (BCs). Inhibition of SMYD3 is a potential chemotherapeutic strategy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SMYD3 (human) mapping to 1q44.

PRODUCT

SMYD3 (h2): 293T Lysate represents a lysate of human SMYD3 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

SMYD3 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive SMYD3 antibodies. Recommended use: 10-20 μ l per lane.

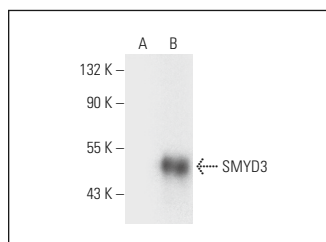
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SMYD3 (C-3): sc-398085 is recommended as a positive control antibody for Western Blot analysis of enhanced human SMYD3 expression in SMYD3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



SMYD3 (C-3): sc-398085. Western blot analysis of SMYD3 expression in non-transfected: sc-117752 (A) and human SMYD3 transfected: sc-173215 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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