

SETD5 (D-12): sc-515645

BACKGROUND

Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor gene cluster and a variety of human cancer related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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- Tsend-Ayush, E., Grützner, F., Yue, Y., Grossmann, B., Hänsel, U., Sudbrak, R. and Haaf, T. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
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- Yue, Y., Grossmann, B., Tsend-Ayush, E., Grützner, F., Ferguson-Smith, M.A., Yang, F. and Haaf, T. 2005. Genomic structure and paralogous regions of the inversion breakpoint occurring between human chromosome 3p12.3 and orangutan chromosome 2. *Cytogenet. Genome Res.* 108: 98-105.

CHROMOSOMAL LOCATION

Genetic locus: SETD5 (human) mapping to 3p25.3.

SOURCE

SETD5 (D-12) is a mouse monoclonal antibody raised against amino acids 1341-1442 mapping at the C-terminus of SETD5 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SETD5 (D-12) is available conjugated to agarose (sc-515645 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515645 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515645 PE), fluorescein (sc-515645 FITC), Alexa Fluor® 488 (sc-515645 AF488), Alexa Fluor® 546 (sc-515645 AF546), Alexa Fluor® 594 (sc-515645 AF594) or Alexa Fluor® 647 (sc-515645 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515645 AF680) or Alexa Fluor® 790 (sc-515645 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

SETD5 (D-12) is recommended for detection of SETD5 of human origin by Western Blotting (starting dilution 1:100, 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).

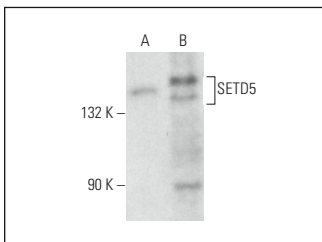
Suitable for use as control antibody for SETD5 siRNA (h): sc-78478, SETD5 shRNA Plasmid (h): sc-78478-SH and SETD5 shRNA (h) Lentiviral Particles: sc-78478-V.

Positive Controls: Raji whole cell lysate: sc-364236 or U-87 MG cell lysate: sc-2411.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SETD5 (D-12): sc-515645. Western blot analysis of SETD5 expression in Raji (A) and U-87 MG (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Cho, H.I., Jo, S., Kim, M.S., Kim, H.B., Liu, X., Xuan, Y., Cho, J.W. and Jang, Y.K. 2023. SETD5 regulates the OGT-catalyzed O-GlcNAcylation of RNA polymerase II, which is involved in the stemness of colorectal cancer cells. *Sci. Rep.* 13: 19885.

STORAGE

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

RESEARCH USE

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