SANTA CRUZ BIOTECHNOLOGY, INC.

DOT1 (yL-15): sc-28103

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The Power to Question

BACKGROUND

Yeast disruptor of telomeric silencing-1 (DOT1) functions in gene silencing at the pachytene checkpoint during the meiotic cell cycle. This owes to the fact that DOT1 methylates Histone H3 at Lysine 79. Methylation of histone proteins affects chromatin structure to regulate gene expression, in this case, resulting in silencing of genes located near chromosome telomeres. This methylation limits silencing to discrete loci by preventing the binding of Sir proteins along the genome, and as these interacting proteins are conserved across species, similar mechanisms likely exist in other eukaryotes.

REFERENCES

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SOURCE

DOT1 (yL-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DOT1 of *Saccharomyces cerevisiae* origin.

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-28103 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

DOT1 (yL-15) is recommended for detection of DOT1 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

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.