

# Set1 (yE-13): sc-25945

## BACKGROUND

The trithorax gene family functions to maintain specific patterns of gene expression throughout cellular development by activating or repressing transcription. Members of this family contain a highly conserved 130- to 140-amino acid motif designated the SET domain, and include the *Drosophila* and human trithorax and Su(var)3-9 protein homologues. The *Saccharomyces cerevisiae* trithorax homolog Set1, a histone H3-lysine 4 (H3-K4) methylase, regulates chromatin structure, DNA repair, and telomeric function. It also regulates rDNA silencing, either directly or indirectly, via H3 methylation. Set1 forms a complex with six other nonessential proteins. This complex, designated COMPASS (Complex Proteins Associated with Set1) includes Cps25, Cps30, Cps35, Cps40, Cps50, and Cps60. Phosphorylation of the C-terminal domain (CTD) of Pol II at serine 5 by the TFIIF-associated kinase mediates the transition between initiation and elongation. Set1 associates with this phosphorylated form of Pol II, and may provide a molecular memory of recent transcriptional activity.

## REFERENCES

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## SOURCE

Set1 (yE-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Set1 of *Saccharomyces cerevisiae* origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-25945 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Set1 (yE-13) is recommended for detection of Set1 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).

Molecular Weight of Set1: 124 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.

## 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.

## PROTOCOLS

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Try **Set1 (1.4): sc-101858**, our highly recommended monoclonal alternative to Set1 (yE-13).