

Suz12 antibody (pAb)

Catalog Nos: 39357, 39057, 39358

RRID: AB_2614929

Application(s): ChIP, ChIP-Seq, CUT&RUN, IF, WB

Reactivity: Human, Mouse

Volumes: 100 µl, 50 µl, 10 µl

Purification: Affinity Purified

Host: Rabbit

Isotype: IgG

Molecular Weight: 95 kDa

Background: Suz12 (Suppressor-of-Zeste 12 protein, also designated as ChET9, JJAZ1 protein) is a component of the Polycomb group complexes 2, 3 and 4 (PRC2, PRC3 and PRC4), which also contain the histone methyltransferase EZH2, EED (Embryonic Ectoderm Development protein) protein and the histone-binding proteins RbAP46 and RbAP48. PRC2 is responsible for di- and trimethylation of histone 3 at lysine 27 (Histone H3K27me2 and Histone H3K27me3), which leads to transcriptional repression of the target genes. Suz12 is a nuclear protein belonging to the VEFS family. Suz12 contains a zinc-finger binding motif and a VEFS box, which is required for the interaction between Suz12 and EZH2.

Immunogen: This Suz12 antibody was raised against a peptide corresponding to the C-terminus of human Suz12.

Buffer: PBS, 30% glycerol, 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

ChIP: 10 µl per ChIP

ChIP-Seq: 10 µl each

WB*: 1:250 - 1:1,000 dilution

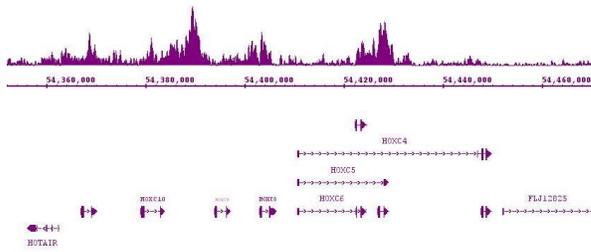
CUT&RUN: 1 µl per 50 µl reaction

*Note: Many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot. An additional band at approximately 20 kDa is also detected by this antibody in HeLa and HEK lysates, but not in mouse CSML0 cell lysate.

For Suz12, we also offer AbFlex® Suz12 Recombinant Antibody (rAb). For details, see Catalog No. 91163.

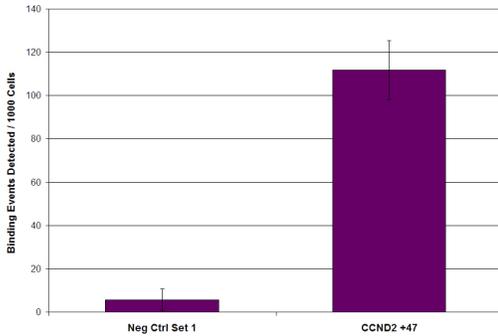
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



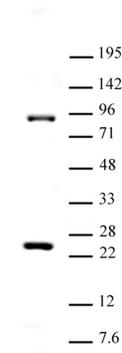
Suz12 antibody (pAb) tested by ChIP-Seq.

ChIP was performed using the ChIP-IT[®] High Sensitivity Kit (Cat. No. 53040) with 30 ug of chromatin from a human B cell lymphoma cell line and 10 µl of antibody. ChIP DNA was sequenced on the Illumina HiSeq and 15 million sequence tags were mapped to identify Suz12 binding sites. The image shows binding across a region of chromosome 12.



Suz12 antibody (pAb) tested by ChIP.

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT[®] High Sensitivity Kit (Cat. No. 53040) with 30 µg of chromatin from human non-small cell lung carcinoma cell line NCI-H1299 cells and 10 µl of Suz12 antibody. ChIP DNA was used in qPCR with the control primer pairs or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.



Suz12 antibody (pAb) tested by Western blot.

HeLa cell nuclear extract (20 µg) was probed with Suz12 pAb (1:500 dilution).

Suz12 antibody (pAb) tested by CUT&RUN

CUT&RUN was performed using 500,000 K562 cells and sequenced using 38 base-pair, paired-end reads on the Illumina NovaSeq. Data was collected from 30 million reads, and Suz12 data is shown for Chromosome 11.

