AbFlex® Histone H3K27me3 antibody (rAb)

Catalog Nos: 91403, 91404
RRID: AB_3216373
Application(s): ChIP, DB, WB
Reactivity: Human, Wide Range Predicted

Quantities: 100 µg, 10 µg
Purification: Protein A Chromatography
Host: Rabbit
Isotype: IgG
Molecular Weight: 17 kDa

Background: AbFlex® antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports. AbFlex® Histone H3K27me3 antibody was expressed in 293 cells, and contains rabbit immunoglobulin heavy and light chains.

Histone H3 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). The methylation of histones can occur on two different residues: arginine or lysine. Histone methylation can be associated with transcriptional activation or repression, depending on the methylated residue. Lysine 27 of histone H3 can be mono-, di- or trimethylated (Histone H3 monomethyl Lys27, Histone H3 dimethyl Lys27 or Histone H3 trimethyl Lys27) by different histone methyltransferases such as EZH2 or NSD3. Methylation of this residue is mainly associated with transcriptional repression.

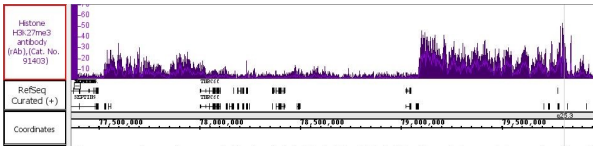
Immunogen: This Histone H3 trimethyl Lys27 antibody was raised against a peptide containing trimethyl Lys27 of human Histone H3.

Buffer: 140 mM Hepes, pH 7.5, 70 mM NaCl, 32 mM NaOAc, 0.035% sodium azide, and 30% glycerol. Sodium azide is highly toxic.

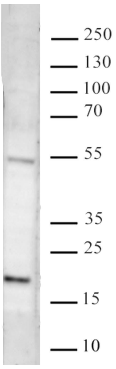
Application Notes:
Applications Validated by Active Motif:
ChIP-Seq: 5 - 10 µg each
WB: 0.5 - 2 µg/ml
DB: 1 µg/ml

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.

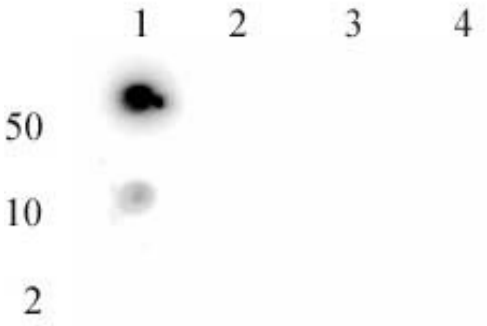
This product is for research use only and is not for use in diagnostic procedures.



AbFlex® Histone H3K27me3 antibody (rAb) tested by ChIP-Seq
Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 17 µg of B2B cell chromatin and 5 µg of antibody. ChIP DNA was sequenced on the Illumina NextSeq and 14 million sequence tags were mapped to identify Histone H3K27me3 binding sites on chromosome 17.



AbFlex® Histone H3K27me3 antibody specificity is shown by Western Blot. 20 µg of HeLa cell nuclear extract* was run on SDS-PAGE and probed with AbFlex Histone H3K27me3 antibody at 0.5 µg/ml.



AbFlex® Histone H3K27me3 antibody specificity is shown by Dot Blot. Recombinant proteins were spotted onto Nitrocellulose as follows: Lane 1 - Histone H3K27me3 (MLA), Cat. No. 31216; Lane 2 - Histone H3K27me2 (MLA), Cat. No. 31215; Lane 3 - Histone H3K27me1 (MLA)Cat. No. 31214; Lane 4 - Histone H3 (C110A), Cat. No. 31207; Probed with AbFlex Histone H3K27me3 antibody at 1 µg/ml.