

Anti-H3K27me3 [BT164] Standard Size Ab01682-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2b format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: BT164

Alternative Name(s) of Target: trimethyl-Histone H3 (Lys27); histone H3; H3K27me3; Histone H3 trimethylated at Lysine 27; nucleosome; H3K27ME3

UniProt Accession Number of Target Protein:

Published Application(s): ICC, IP, WB, ELISA, IF, IHC

Published Species Reactivity: Human

Immunogen: BT164 is a mice-derived lupus antibody that was established by selection on apoptotic chromatin.

Specificity: The epitope of BT164 was mapped in the N-terminal tail of histone H3 (27-KSAPAT-32) and included the apoptosis-induced trimethylation of K27.

Application Notes: BT164 recognizes an apoptosis-induced trimethylation of K27 on N-terminal tail of histone H3 which is a target for autoantibodies in patients and mice with SLE (systemic lupus erythematosus) (van Bavel et al., 2011; pmid: 20699234). Consequently, this antibody is recommended for the detection and studying of SLE. ELISA studies demonstrated that BT164 exhibits preferential activity with the apoptotic nucleosomes in comparison with the control nucleosomes (van Bavel et al., 2011; pmid: 20699234). It can be used for the detection of apoptosis in general. Furthermore, this antibody was demonstrated to label cells with methylated histone-3 on K27 via immunofluorescence and it also immunoprecipitated chromatin with such a methylation profile, further demonstrating its ability to specifically recognize markers characteristic of SLE (van Bavel et al., 2011; pmid: 20699234).

Antibody First Published in: van Bavel et al. Apoptosis-induced histone H3 methylation is targeted by autoantibodies in systemic lupus erythematosus. Ann Rheum Dis. 2011 Jan;70(1):201-7. doi: 10.1136/ard.2010.129320. Epub 2010 Aug 10. [PMID:20699234](#)

Note on publication: This article describes the generation and characterization of the antibody BT164.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.