

Anti-H3K27me3 [BT164] Standard Size Ab01682-3.0

Isotype and Format: Mouse IgG2b, 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-derrived 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 -

