

H3K27me3 (ZR473)

Rabbit Monoclonal Antibody

Host: Rabbit Specificity: Human

Immunogen: Synthetic peptide corresponding to the amino terminus of histone H3 in which me3K corresponds to

trimethyl-lysine at residue 27

Ig Class: Ig G

Storage: Store at 2-8°C for up to 2 years for concentrate form and 18 months for predilute form.

Specifications: H3K27me3 (ZR473) Rabbit monoclonal primary antibody detects H3K27me3 protein in formalin-fixed, paraffin-embedded samples by immunohistochemical (IHC) staining.

Staining procedures: Use formalin-fixed and paraffin-embedded sections. Retrieval conditions: Pretreatment of deparaffinized samples via heat-induced epitope retrieval is recommended. Detection method: Polymer anti-mouse/rabbit Ig detection system. Working dilution: 1:100-200. Positive Control: sample known to contain H3K27me3 protein.

Localization: Nuclear.

Intended Use: Research Use Only (RUO). This antibody is not for diagnostic use.

Description: H3K27me3 refers the trimethylation of lysine 27 on histone H3, a key epigenetic modification associated with gene regulation. Histone H3 is one of the five main histone proteins involved in the structure of chromatin in eukaryotic cells. The N-terminal tail of histone H3 can undergo several different types of epigenetic modifications that influence cellular processes. These modifications include the covalent attachment of methyl or acetyl groups to lysine and arginine amino acids and the phosphorylation of serine or threonine. Loss-of-function somatic alterations in different components of the polycomb repressive complex 2 (PRC2) occur in most malignant peripheral nerve sheath tumors (MPNSTs). These highly recurrent and specific inactivation of PRC2 components co-occurred with somatic alterations of CDKN2A and NF1. MPNSTs with PRC2 inactivation through EED or SUZ12 alterations showed consistent complete loss of trimethylation at lysine 27 of histone H3 (H3K27me3) by IHC analysis. Approximately 90% of sporadic and radiation associated MPNSTs and 50% NF1-associated MPNSTs show loss of H3K27me3 expression. In addition, diffuse intrinsic pontine glioma and midline glioma also loss H3K27me3 expression.

Supplied As: Purified antibody in Tris-HCl pH 7.4 buffer containing stabilizing proteins (including < 1% Bovine Serum Albumin) and < 0.1% ProClin by volume.

References:

- 1. Makise N, et al. Am J Surg Pathol. 2018; 42:656-644
- 2. Busam KJ, et al. Am J Surg Pathol. 2017; 41:396-404.
- 3. Huang SC, et al. Am J Surg Pathol. 2016; 40:876-85.

REF

Z2843RL-R/ Z2843RS-R/ Z2843RT-R /Z2843RP-R (1.0ml Concentrate/ 0.5ml Con./ 0.1ml Con./ 7ml Pre-dil)



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RUO (research use only) (lot number)

(catalogue number)

(expiry date)

(temperature

(consult Instructions for Use)