

# H3K27me3

## Rabbit Polyclonal Antibody

**Specificity:** Human, mouse

**Immunogen:** Synthetic peptide containing the sequence AR(me3K)SAP in which me3K corresponds to trimethyl-lysine at residue 27 of human histone H3

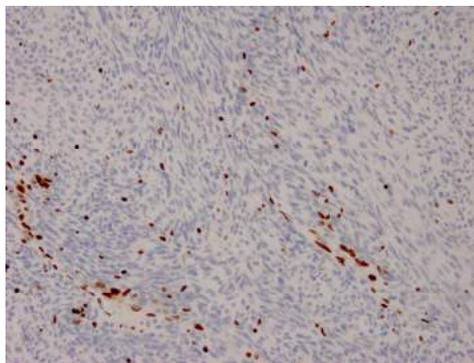
**Ig Class:** Rabbit IgG

**Storage:** Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50-100; *Positive Control:* Malignant peripheral nerve sheath tumor (nuclear negative). *Cellular Localization:* Nuclear. *Intended Use:* In vitro diagnosis (IVD).

**Description:** 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 the majority of malignant peripheral nerve sheath tumors (MPNSTs). These highly recurrent and specific inactivations 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.

**Supplied As:** Purified antibody fraction from rabbit anti-serum with 0.2% BSA and 15mM sodium azide.



*Formalin-fixed, paraffin-embedded MPNST stained with anti-H3K27me3 polyclonal antibody using peroxidase-conjugate and DAB chromogen. Note that tumor cells are negative (nuclear) whereas as non-tumor cells positive*

Cat. #Z2319 (1.0 ml)