Sigma-Aldrich®
Lab & Production Materials

MERCK

Cell Marque™ Tissue Diagnostics

H3 K27M (RM192)

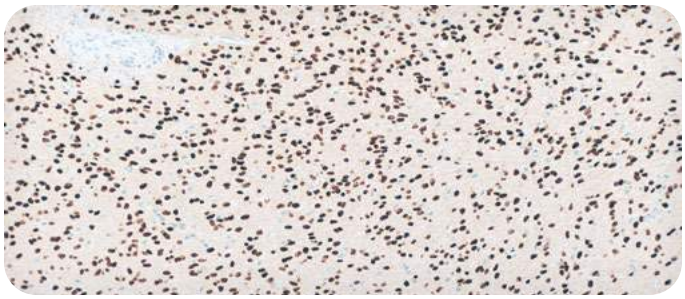
Rabbit Monoclonal Antibody

Detection of the H3 K27M protein by immunohistochemistry with H3 K27M (RM192) Rabbit Monoclonal Antibody may be used to aid in the diagnosis of diffuse midline gliomas.

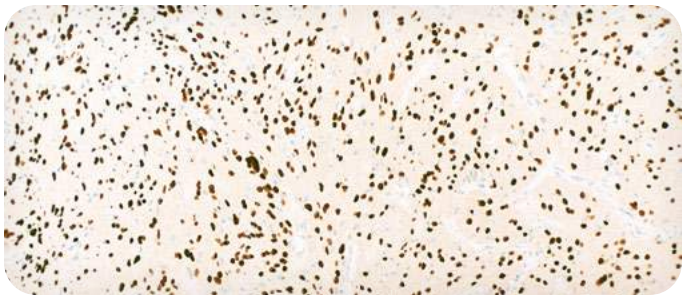
Histone proteins provide structural support for chromosomal DNA and regulate the accessibility of genes for transcription. H3 K27M is a mutant histone protein that is produced by a point mutation (K27M) in either the H3.3 or the H3.1 histone genes.[1] Diffuse midline gliomas harbor H3 K27M alterations and show expression of the H3 K27M protein, which is not expressed in normal tissues.[1-4] Immunohistochemistry for H3 K27M shows a nuclear pattern of staining.

Ordering Information:

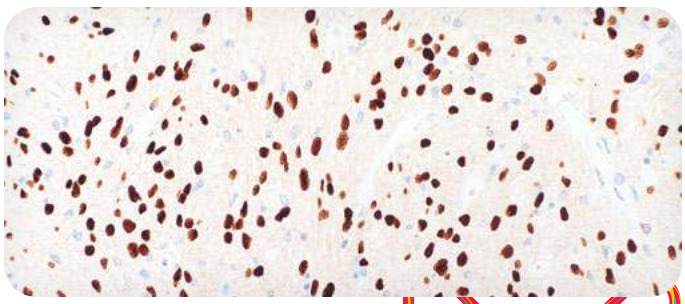
Cat No.	Description
492R-14	0.1 mL concentrate
492R-15	0.5 mL concentrate
492R-16	1.0 mL concentrate
492R-17	1.0 mL predilute ready-to-use
492R-18	7.0 mL predilute ready-to-use



Diffuse midline glioma



Diffuse midline glioma



Diffuse midline glioma

Intended Use:

This antibody is intended for *in vitro* diagnostic (IVD) use.

H3 K27M (RM192) Rabbit Monoclonal Antibody is intended for laboratory use in the detection of the H3 K27M mutant protein in formalin-fixed, paraffin-embedded human tissue stained in qualitative immunohistochemistry (IHC) testing.

The results using this product should be interpreted by a qualified pathologist in conjunction with the patient's relevant clinical history, other diagnostic tests and proper controls.

Product Information:

Visualization: Nuclear

Controls: Diffuse midline glioma

Dilution Range: 1:100–1:200

Associated Specialty: Neuropathology, Pediatric Pathology

References:

1. Bozkurt SU, et al. Significance of H3K27M mutation with specific histomorphological features and associated molecular alterations in pediatric high-grade glial tumors. Childs Nerv Syst. 2018 Jan;34(1):107-116.
2. Roux A, et al. High-grade gliomas in adolescents and young adults highlight histomolecular differences from their adult and pediatric counterparts. Neuro Oncol. 2020 Aug 17;22(8):1190-1202.
3. Ebrahimi A, et al. High frequency of H3 K27M mutations in adult midline gliomas. J Cancer Res Clin Oncol. 2019 Apr;145(4):839-850.
4. Solomon DA, et al. Diffuse Midline Gliomas with Histone H3-K27M Mutation: A Series of 47 Cases Assessing the Spectrum of Morphologic Variation and Associated Genetic Alterations. Brain Pathol. 2016 Sep;26(5):569-80.

Phone: **+1 916.746.8900**
Fax: **+1 916.746.8989**
Email: **international@cellmarque.com**
www.cellmarque.com

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt, Germany

SigmaAldrich.com

MK_FL13677EN Ver. 0.0 56114 12/2024