

**Rabbit Anti-Histone H3 Acetyl Lys27/H3K27ac [MD162R]: RM0118**

**Intended Use:** For Research Use Only

**Description:** The Histone H3 is one of the five main histone proteins involved in the structure of chromatin in eukaryotic cells. Featuring a main globular domain and a long N-terminal tail, H3 is involved with the structure of the nucleosomes of the 'beads on a string' structure. The N-terminal tail of histone H3 protrudes from the globular nucleosome core and 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. Histone H3 is primarily acetylated at Lys9, 14, 18, 23, 27, and 56. Acetylation of H3 at Lys27 appears to have a dominant role in histone deposition and chromatin assembly in some organisms.

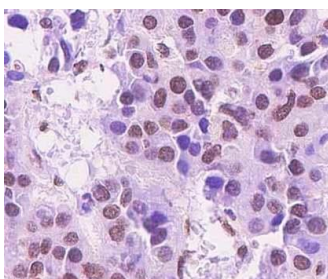
**Specifications**

Clone: MD162R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse, rat  
 Immunogen: A synthetic peptide corresponding to the amino terminus of histone H3 acetylated Lys27  
 Localization: Nucleus, chromosome  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ICC/IF, WB  
 Package:

Description	Catalog No.	Size
Histone H3 Acetyl Lys27/H3K27ac Concentrated	RM0118	1 ml

**IHC Procedure**

Positive Control Tissue: Liver cancer, lung or pancreas tissue, HeLa cells  
 Concentrated Dilution: 50-500  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human liver cancer stained with anti-H3K27ac using DAB

**References:**

1. Induction of Thioredoxin-Interacting Protein by a Histone Deacetylase Inhibitor, Entinostat, Is Associated with DNA Damage and Apoptosis in Esophageal Adenocarcinoma. Feingold PL, et al. Mol Cancer Ther 17:2013-2023, 2018.
2. Harnessing BET Inhibitor Sensitivity Reveals AMIGO2 as a Melanoma Survival Gene. Fontanals-Cirera B, et al. Mol Cell 68:731-744.e9, 2017.
3. Histone Deacetylase 3 Deletion in Mesenchymal Progenitor Cells Hinders Long Bone Development. Feigenson M, et al. J Bone Miner Res 32:2453-2465, 2017.