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Mutated-HIST1H3A (K27) Recombinant **Monoclonal Antibody**

| Product Code | CSB-RA943659A0HU |
|---------------------|---|
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | P68431 |
| Immunogen | A synthesized peptide derived from Human HIST1H3A |
| Species Reactivity | Human |
| Tested Applications | ELISA, IHC; Recommended dilution: IHC:1:50-1:200 |
| Form | Liquid |
| Conjugate | Non-conjugated |
| Storage Buffer | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Purification Method | Affinity-chromatography |
| Isotype | Rabbit IgG |
| Clonality | Monoclonal |
| Product Type | Recombinant Antibody |
| Immunogen Species | Homo sapiens (Human) |
| Research Area | Epigenetics and Nuclear Signaling |
| Gene Names | HIST1H3A |
| Clone No. | 35C11 |

Image



IHC image of CSB-RA943659A0HU diluted at 1:100 and staining in paraffin-embedded human gastric cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.08% DAB.

Description

The production of the mutated-HIST1H3A (K27) recombinant monoclonal antibody generally begins with the incorporation of the HIST1H3A antibodyencoding gene into expression vectors. These vectors are then introduced into host cells using polyethyleneimine-mediated transfection. The host cells, housing the expression vectors, are cultured to manufacture and release the antibodies. Subsequent purification via affinity chromatography is followed by

1



assessments through ELISA and IHC assays, verifying their ability to specifically bind to the human HIST1H3A protein mutated at K27.

HIST1H3A mutated at K27 is known as H3K27M mutation and disrupts normal epigenetic regulation, leading to altered gene expression patterns that contribute to the development of aggressive pediatric brain tumors, most notably diffuse intrinsic pontine gliomas (DIPG) and midline gliomas.