

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **HIST1H3A** polyclonal antibody

Catalog: BS65012 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

Diffuse intrinsic pontine glioma (DIPG) is an aggressive brainstem astrocyte tumor arising mostly in children, leading to a long-term survival rate of less than 10%. Multiple whole-genome sequencing studies of DIPG patients identified commonly occurring mutations in the H3F3A gene encoding histone H3.3. One of these mutations, a lysine to methionine amino acid substitution (K27M), is found in up to 78% of DIPGs and 22% of non-brainstem pediatric gliomas. This mutation is associated with poor prognosis, with a mean survival time of 0.73 years for patients with the K27M mutation versus 4.6 years for patients without the mutation. Expression of the K27M mutant histone H3 is accompanied by a dramatic reduction in the levels of polycomb repressive complex 2 (PRC2)-mediated trimethylation of histone H3, changes in the distribution of PRC2 on the genome, and altered expression of genes associated with various cancer pathways.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

# **Molecular Weight:**

~ 17 kDa

#### **Swiss-Prot:**

P68431; Q71DI3; P84243; Q6NXT2

## **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB: 1:500~1:1000

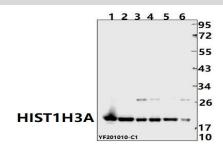
## Storage&Stability:

Store at  $4 \, \mathbb{C}$  short term. Aliquot and store at  $-20 \, \mathbb{C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

HIST1H3A polyclonal antibody detects endogenous levels of HIST1H3A protein.

#### **DATA:**



Western blot (WB) analysis of HIST1H3A polyclonal antibody at

1:1000 dilution

Lane1:COS-7 whole cell lysate(40ug)

Lane2:3T3-L1 whole cell lysate(40ug)

Lane3:C6 whole cell lysate(40ug)

Lane4:A549 whole cell lysate(40ug)

Lane5:U-87MG whole cell lysate(40ug)

Lane6:Hela whole cell lysate(40ug)

#### Note

For research use only, not for use in diagnostic procedure.

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