### For Research Use Only

# JMJD3 Polyclonal antibody

Catalog Number: 55354-1-AP 7 Publications



**Basic Information** 

Catalog Number:

GenBank Accession Number:

Purification Method:

55354-1-AP

NM\_001080424 GeneID (NCBI): Antigen affinity purification

Size:

150ul, Concentration: 600 ug/ml by 23135

Recommended Dilutions: WB: 1:500-1:2400

Nanodrop:

UNIPROT ID:

ID.

Source: Rabbit O15054 Full Name:

jumonji domain containing 3, histone

Isotype:

lysine demethylase

Calculated MW: 177 kDa

Observed MW:

177 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species: human, mouse, rat Positive Controls:

WB: A549 cells, HeLa cells

## **Background Information**

JMJD3, also known as KDM6B, is a 1643 amino acid protein, which belongs to the UTX family. JMJD3 is a Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code (PubMed:17851529, PubMed:17851529, PubMed:17851529, PubMed:17851529). JMJD3 demethylates trimethylated and dimethylated H3 'Lys-27', so it Plays a central role in regulation of posterior development, by regulating HOX gene expression (PubMed:17851529). Histone demethylases are epigenetic actors with a crucial role in cancer by acting as suppressors of tumors or as oncogenes. JMJD3 and UTX (ubiquitously transcribed tetratricopeptide repeat, X chromosome) are transcription activators, being specific H3K27me3 demethylases. JMJD3 is involved in many cellular process such as development, differentiation, senescence and aging by p16, p53 and RB pathways and finally inflammation. Depending on cancer type, JMJD3 expression is increased (prostate and breast cancers, melanoma, gliomas, renal cell carcinoma or decreased (lung, liver, pancreatic, colon and colorectal cancers. This role in carcinogenesis has allowed the development of "epidrugs" to modulate JMJD3 expression (PMID: 29805743).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Zhen Xiao	30896884	Oncol Rep	WB
Lijie Tian	28587848	Gene	WB
Hong Chen	30516825	J Physiol	WB

Storage

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:

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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 55354-1-AP (JMJD3 antibody) at dilution of 1:1200 incubated at room temperature for 1.5 hours.