

For Research Use Only

JMJD3 Polyclonal antibody

Catalog Number: 55354-1-AP **5 Publications**



Basic Information

Catalog Number: 55354-1-AP	GenBank Accession Number: NM_001080424	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 600 µg/ml by Nanodrop;	GeneID (NCBI): 23135	Recommended Dilutions: WB 1:500-1:2400
Source: Rabbit	Full Name: jumonji domain containing 3, histone lysine demethylase	
Isotype: IgG	Calculated MW: 177 kDa	
	Observed MW: 177 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : A549 cells, HeLa cells
Cited Applications: WB	
Species Specificity: human	
Cited Species: human, rat, mouse	

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:17825402, 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 processes 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

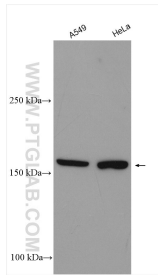
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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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.