

For Research Use Only

KDM3A/JMJD1A Recombinant antibody

Catalog Number: 83571-2-RR



Basic Information

Catalog Number: 83571-2-RR	GenBank Accession Number: BC038297	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 55818	CloneNo.: 240532G11
Source: Rabbit	UNIPROT ID: Q9Y4C1	Recommended Dilutions: WB 1:1000-1:4000 IHC 1:200-1:800 IF/ICC 1:125-1:500
Isotype: IgG	Full Name: lysine (K)-specific demethylase 3A	
Immunogen Catalog Number: AG28687	Calculated MW: 150 kDa	
	Observed MW: 140-150 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls: WB : HepG2 cells, HEK-293 cells, HeLa cells, SKOV-3 cells, HCT 116 cells IHC : human ovarian cancer, IF/ICC : HepG2 cells,
Species Specificity: human	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

KDM3A, also name as JMJD1A, JHDM2A, JMJD1, JMJD1A, KIAA0742 and TSGA, belongs to the JHDM2 histone demethylase family. It is a histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. It is involved in spermatogenesis by regulating expression of target genes such as PRM1 and TMP1 which are required for packaging and condensation of sperm chromatin. It is involved in obesity resistance through regulation of metabolic genes such as PPARA and UCP1. (PubMed:16603237), JMJD1A is a useful biomarker for hypoxic tumor cells and a prognostic marker that could be a promising therapeutic target against CRC.

Storage

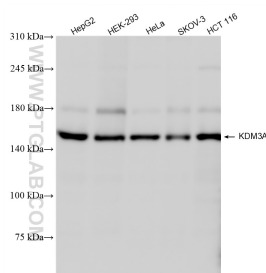
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

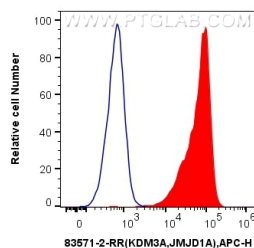
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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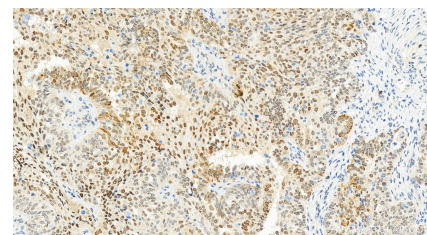
Selected Validation Data



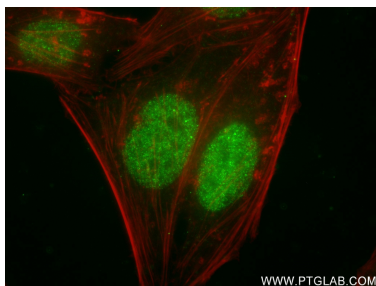
Various lysates were subjected to SDS PAGE followed by western blot with 83571-2-RR (KDM3A, JMJD1A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



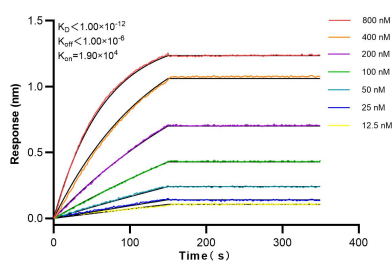
1x10⁶ HEK-293 cells were intracellularly stained with 0.25 ug KDM3A, JMJD1A Recombinant antibody (83571-2-RR, Clone:240532G11) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83571-2-RR (KDM3A, JMJD1A antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using KDM3A, JMJD1A antibody (83571-2-RR, Clone: 240532G11) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 83571-2-RR against Human KDM3A, JMJD1A were performed. The affinity constant is below 1 pM.