

For Research Use Only

KDM3A/JMJD1A Recombinant antibody, PBS Only (Capture)

Catalog Number: 83571-2-PBS



Basic Information

Catalog Number: 83571-2-PBS	GenBank Accession Number: BC038297	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 55818	CloneNo.: 240532G11
Source: Rabbit	UNIPROT ID: Q9Y4C1	
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), Cytometric bead array,
Indirect ELISA

Species Specificity:
human

Product Information

83571-2-PBS targets KDM3A/JMJD1A as part of a matched antibody pair:

MP00565-1: 83571-2-PBS capture and 83571-4-PBS detection (validated in Cytometric bead array)

MP00565-2: 83571-2-PBS capture and 83571-5-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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 -80°C.

Storage Buffer:
PBS Only

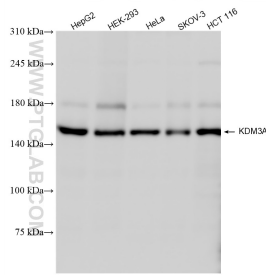
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
in USA), or 1(312) 455-8498 (outside USA)

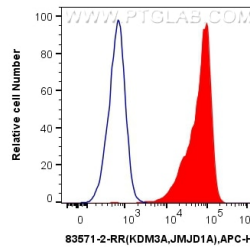
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

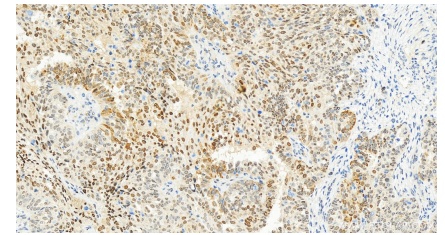
Selected Validation Data



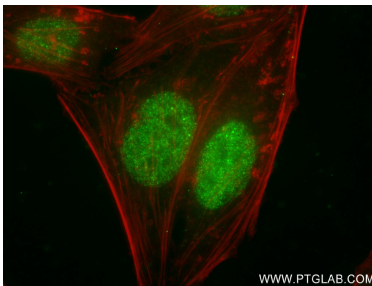
Various lysates were subjected to SDS PAGE followed by western blot with 83571-2-RR (KDM3A, JMJD1A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83571-2-PBS in a different storage buffer formulation.



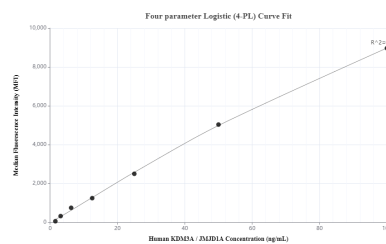
1x10⁶ HEK-293 cells were intracellularly stained with 0.25 ug KDM3A, JMJD1A Recombinant antibody (83571-2-RR, Clone:240532G11) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83571-2-PBS in a different storage buffer formulation.



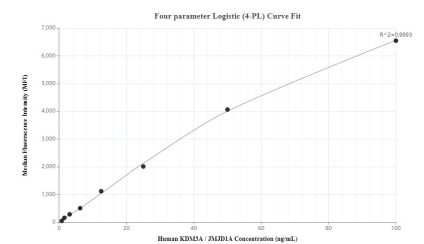
Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83571-2-RR (KDM3A, JMJD1A antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83571-2-PBS in a different storage buffer formulation.



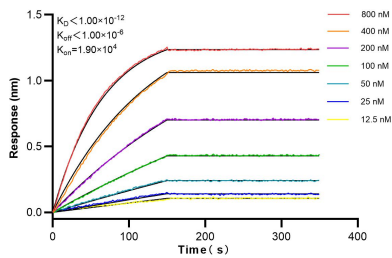
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using KDM3A, JMJD1A antibody (83571-2-RR, Clone: 240532G11) at dilution of 1:250 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83571-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00565-1, KDM3A, JMJD1A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83571-2-PBS. Detection antibody: 83571-4-PBS. Standard: Ag28687. Range: 1.56-100 ng/mL.



Cytometric bead array standard curve of MP00565-2, KDM3A, JMJD1A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83571-2-PBS. Detection antibody: 83571-5-PBS. Standard: Ag28687. Range: 0.781-100 ng/mL.



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