For Research Use Only

## KDM3A/JMJD1A Recombinant antibody, PBS Only (Capture)

Catalog Number:83571-2-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

240532G11

**Basic Information** 

Catalog Number: GenBank Accession Number:

83571-2-PBS BC038297
Size: GeneID (NCBI):

 1 mg/ml
 55818

 Source:
 UNIPROT ID:

 Rabbit
 Q9Y4C1

IgG lysine (K)-specific demethylase 3A

Immunogen Catalog Number: Calculated MW: AG28687 150 kDa

Observed MW: 140-150 kDa

Full Name:

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), Cytometric bead array,

Indirect ELISA
Species Specificity:

human

Isotype:

**Background Information** 

KDM3A, also name as JMJD1A, JHDM2A, JMJD1, JMJD1A, KIAAO742 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

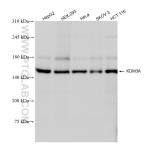
Storage:

Store at -80°C.

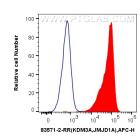
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  $\,$ 

Storage Buffer PBS Only

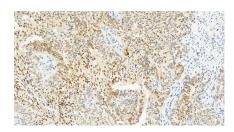
## Selected Validation Data



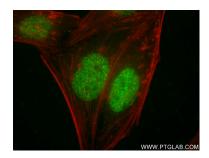
Various lysates were subjected to SDS PAGE followed by western blot with 83571-2-RR (KDM3A, JMI) D1A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83571-2-PBS in a different storage buffer formulation.



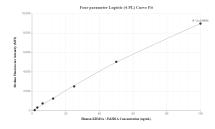
1x10^6 HEK-293 cells were intracellularly stained with 0.25 ug KDM3A,JMD1A Recombinant antibody (83571-2-RR, Clone:240532G11) and APC-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83571-2-PBS in a different storage buffer formulation.



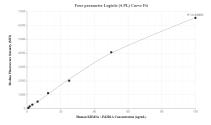
Immunohistochemical analysis of paraffinembedded human ovarian cancer slide using 83571-2-RR (KDM3A,JMJD1A antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83571-2-PBS in a different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



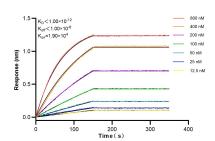
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using KDM3A,JMJD1A antibody (83571-2-RR, Clone: 240532G11) at dilution of 1:250 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83571-2-PBS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



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