

## **Product datasheet for RC218944L1**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### JHDM1D (KDM7A) (NM\_030647) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: | IHDM1D (KDM7A) (NM 030647) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: JHDM1D
Synonyms: JHDM1D
Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

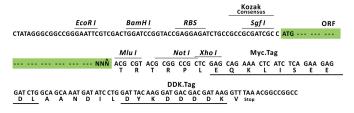
**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC218944).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_030647

ORF Size: 2823 bp





#### JHDM1D (KDM7A) (NM\_030647) Human Tagged Lenti ORF Clone - RC218944L1

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 030647.1</u>

 RefSeq Size:
 9178 bp

 RefSeq ORF:
 2826 bp

 Locus ID:
 80853

 UniProt ID:
 Q6ZMT4

 Cytogenetics:
 7q34

MW: 106.4 kDa

**Gene Summary:** Histone demethylase required for brain development. Specifically demethylates dimethylated

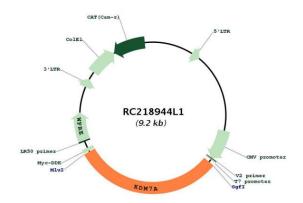
'Lys-9' and 'Lys-27' (H3K9me2 and H3K27me2, respectively) of histone H3 and

monomethylated histone H4 'Lys-20' residue (H4K20Me1), thereby playing a central role in histone code. Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: in presence of H3K4me3, it has no demethylase activity toward H3K9me2, while it has high activity toward H3K27me2. Demethylates H3K9me2 in absence of H3K4me3. Has activity toward H4K20Me1 only when nucleosome is used as a substrate and when not histone octamer is used as substrate.[UniProtKB/Swiss-Prot

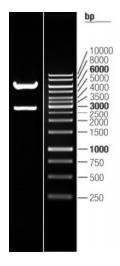
Function]



# **Product images:**



Circular map for RC218944L1



Double digestion of RC218944L1 using Sgfl and Mlul  $\,$