



# Human KDM7A peptide (DAG-P0717)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the JHDM1 histone demethylase family. JHDM1D subfamily. Contains 1 JmjC domain. Contains 1 PHD-type zinc finger.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">KDM7A lysine (K)-specific demethylase 7A [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	KDM7A
<b>Synonyms</b>	KDM7A; lysine (K)-specific demethylase 7A; JHDM1D; lysine-specific demethylase 7A; lysine-specific demethylase 7; histone lysine demethylase JHDM1D; jmjC domain-containing histone demethylation protein 1D; jumonji C domain containing histone demethylase 1 homolog D; jumonji C domain-containing histone demethylase 1 homolog D;

<b>Entrez Gene ID</b>	<a href="#">80853</a>
<b>mRNA Refseq</b>	<a href="#">NM_030647.1</a>
<b>Protein Refseq</b>	<a href="#">NP_085150.1</a>
<b>UniProt ID</b>	Q6ZMT4
<b>Chromosome Location</b>	7q34
<b>Function</b>	histone demethylase activity (H3-K27 specific); histone demethylase activity (H3-K36 specific); histone demethylase activity (H3-K9 specific); histone demethylase activity (H4-K20 specific); iron ion binding; iron ion binding; methylated histone residue b