

**DESCRIPTION**

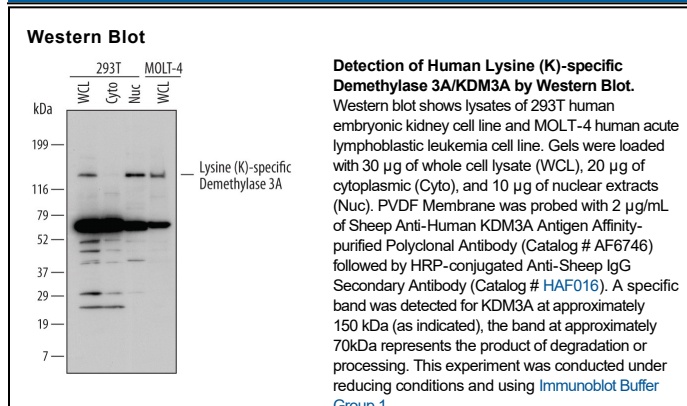
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human KDM3A in direct ELISAs and Western blots. In direct ELISAs, approximately 3% cross-reactivity with recombinant human (rh) KDM4A is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human KDM3A Pro844-Glu968 Accession # Q9Y4C1
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

JMJD1A (Jumonji [Japanese for "cruciform/cross"]/ARID domain-containing protein 1A; also KDM3A, JHDM2A, and TSGA) is a 140-150 kDa member of the JHDM2 histone demethylase family of proteins. It is induced by hypoxia, and expressed in spermatids, smooth muscle cells, mammary epithelium, hepatocytes, and renal tubular epithelium. JMJD1A is reported to demethylate di- and mono-methylated Lys9 on histone H3. It has no activity on trimethylated Lys9. JMJD1A is both cytoplasmic and nuclear, and serves as a coactivator for the AR. Human JMJD1A is 1321 amino acids (aa) in length. It contains one C6-type zinc-finger motif (aa 662-687) and a jumonji C type catalytic domain (aa 1151-1264). There is one phosphorylation site at Ser445. There is one potential splice variants that shows a 13 aa substitution for aa 699-1321. Over aa 810-968, human JMJD1A shares 94% aa identity with mouse JMJD1A.