

AbFlex® JMJD2D / KDM4D antibody (rAb)

Catalog Nos: 91369, 91370

RRID: AB_3216352

Application(s): DB, IP, WB

Reactivity: Human

Quantities: 100 µg, 10 µg

Purification: Protein A Chromatography

Host: Mouse

Isotype: IgG2a

Molecular Weight: 65 kDa

Background: AbFlex® antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports. AbFlex® JMJD2D / KDM4D antibody was expressed in was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells.

KDM4D (lysine (K)-specific demethylase 4D), also known as **JMJD2D (Jumonji Domain Containing 2D)** is a protein that functions as a histone demethylase that preferentially demethylates di- and trimethylated lysine 9 residues of histone H3, while it has no activity on monomethylated H3K9 residues.

Immunogen: This antibody was raised against recombinant full-length human KDM4D (Lysine (K)-Specific Demethylase 4D).

Buffer: 140 mM Hepes, pH 7.5, 70 mM NaCl, 32 mM NaOAc, 0.035% sodium azide, and 30% glycerol. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

WB*: 0.5 - 2 µg/ml

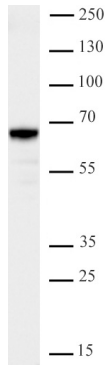
DB: 1 µg/ml

IP: 4 µg per IP

*Note: Many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot. For optimal results, we recommend the addition of 0.05% Tween-20 to all blocking solutions to reduce background in Western blot.

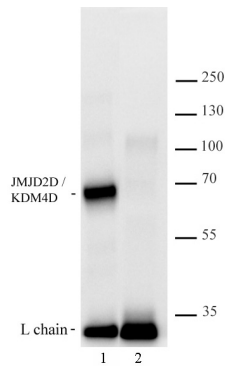
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



AbFlex® JMJD2D/KDM4D antibody tested by Western blot.

20 µg of HEK293 nuclear extract* was run on SDS-PAGE and probed with antibody at 0.5 µg/ml.



AbFlex® JMJD2D/KDM4D antibody tested by Immunoprecipitation.

4 µg of AbFlex JMJD2D/KDM4 antibody (Lane1) or isotype control mouse IgG (Lane 2) was used to immunoprecipitate JMJD2D/KDM4D from 500 µg of HEK293 extract, which was then run on SDS-PAGE and probed with the same antibody at 2 µg/ml. The appearance of antibody light chain at 25 kDa is observed as a cross-reactivity between the WB / IP antibody, and is common.

AbFlex® JMJD2D/KDM4D antibody tested by Dot blot.

Recombinant KDM proteins were spotted onto nitrocellulose membrane (nanograms indicated on row labels) and probed with antibody at 1 µg/ml. Col. 1: KDM4A. Col. 2: KDM4B. Col. 3: KDM4C. Col. 4: KDM5A. Col. 5: KDM5B. Col. 6: KDM5C.

