AbFlex® JMJD2A antibody (rAb)

Catalog Nos: 91143, 91144
RRID: AB_2793788
Application(s): ELISA, WB
Reactivity: Human

Quantities: 100 µg, 10 µg
Purification: Protein A Chromatography
Host: Mouse
Isotype: IgG2a
Concentration: 1 µg/µl
Molecular Weight: 130 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® JMJD2A antibody was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells.

JMJD2A (KDM4A, JHDM3A) is a member of the Jmj-containing (Jumonji) class of histone demethylase proteins that are involved in the regulation of genome function through the removal of methyl groups from histones. JMJD2A specifically demethylates histone H3 dimethyl lysine 9 (H3K9me2), trimethyl lysine 9, (H3K9me3), dimethyl lysine 36 (H3K36me2) and trimethyl lysine 36 (H3K36me3). It also participates in transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1. JMJD2A contains JmjC and JmjN domains, two PHD fingers and two tudor domains.

Immunogen: This JMJD2A antibody was raised against a recombinant protein corresponding to amino acids 586-674 of human JMJD2A.

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

Application Notes:
Applications Validated by Active Motif:
WB*: 1 - 2 µg/ml dilution
Bead-based ELISA: 40 - 600 ng/ml

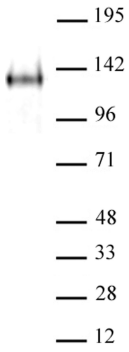
The addition of 0.05% Tween 20 in the blocking buffer and primary antibody incubation buffer is recommended to aid in detection by Western blot. Individual optimization may be required.

*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.

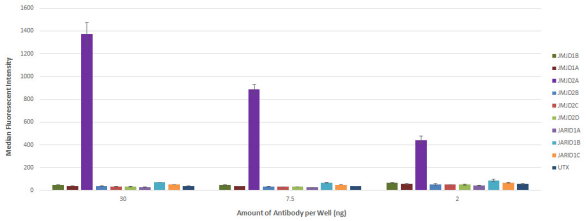
AbFlex® recombinant antibodies are genetically derived from DNA sequences of parental hybridoma clones. For details on the parental clone, see Catalog No. 39815.

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® JMJD2A antibody (rAb) tested by Western blot.
HeLa cell nuclear extract (20 µg) probed with AbFlex® JMJD2A antibody (rAb) at a dilution of 2 µg/ml.



AbFlex® JMJD2A antibody (rAb) tested by Luminex bead-based specificity analysis.
Luminex bead-based specificity analysis was used to confirm the specificity of AbFlexTM JMJD2A antibody (rAb) antibody for JMJD2A. Various proteins were conjugated to MagPlex Luminex beads and incubated with various amounts of AbFlexTM JMJD2A antibody (rAb). Protein-bound antibody was detected with anti-mouse IgG-Phycoerythrin and read in a Luminex instrument.

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