

AbFlex® JMJD2C / KDM4C antibody (rAb)

Catalog Nos: 91307, 91308**Isotype:** IgG2a**Application(s):** WB**Reactivity:** Human**Quantities:** 100 µg, 10 µg**Purification:** Protein A Chromatography**Host:** Mouse**Concentration:** 1 µg/µl**Molecular Weight:** 140 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® JMJD2C/KDM4C antibody was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in CHO (Chinese Hamster Ovary) cells.

KDM4C (lysine (K)-specific demethylase 4C), also known as **JMJD2C (Jumonji Domain Containing 2C)** is a nuclear protein that functions as a histone demethylase that preferentially demethylates di- and trimethylated lysine 9 (K9me3) and lysine 36 (K36me3) residues of histone H3, converting these trimethylated histone residues to mono- or dimethylated form. JMJD2C / KDM4C has no activity for monomethylated H3K9 and H3K36. Chromosomal aberrations and overexpression of KDM4C are associated with esophageal squamous cell carcinoma. KDM4C regulates colonosphere formation in colorectal cancers by mediating the crosstalk between Wnt and Notch signaling pathways.

Immunogen: This antibody was raised against full length, Recombinant Human JMJD2C protein.

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.

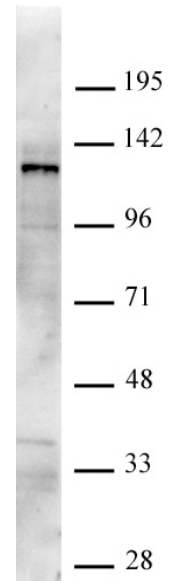
Application Notes:

Applications Validated by Active Motif:

WB: 0.5 – 1 µg/ml

For optimal results, we recommend the addition of 0.05% Tween 20 to all blocking solutions to reduce background. Individual optimization may be required.

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® JMJD2C / KDM4C antibody tested by Western blot.

Nuclear extract of HepG2 cells (20 µg) probed with JMJD2C/KDM4C antibody at 0.5 µg/ml.