

AbFlex® EHMT2 (G9a) antibody (rAb)

Catalog Nos: 91229, 91230**RRID:** AB_2793812**Isotype:** IgG2a**Application(s):** WB**Reactivity:** Human**Quantities:** 100 µg, 10 µg**Purification:** Protein A Chromatography**Host:** Mouse**Concentration:** 1 µg/µl**Molecular Weight:** 160 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 EHMT1 (G9a) antibody was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells.

EHMT2 (G9a) is a histone methyltransferase that specifically mono- and dimethylates Lys9 of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by initiating recruitment of HP1 proteins to methylated histones. EHMT2 (G9a) also mediates monomethylation of Lys56 of histone H3 (H3K56me1) in G1 phase and regulates DNA replication by promoting the interaction between histone H3 and PCNA. EHMT2 (G9a) also weakly methylates Lys27 of histone H3 (H3K27me). EHMT2 (G9a) is most likely targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. EHMT2 (G9a) may also methylate histone H1.

Immunogen: This antibody was raised against full length human recombinant EHMT2 (G9a) protein.

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

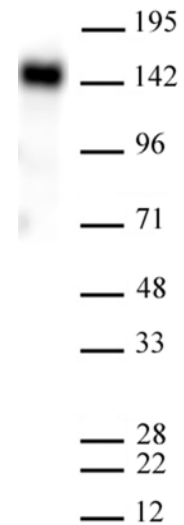
Application Notes:

Applications Validated by Active Motif:

WB*: 0.5 - 2 µg/ml

*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.

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.



AbFlex® EHMT2 (G9a) antibody (rAb) tested by Western blot. 20 µg of HEK293 cell nuclear extract was run on SDS-PAGE and probed with AbFlex EHMT2 (G9a) antibody at 2 µg/ml.