

KDM3A Mouse Monoclonal

Antibody

Background:

This gene encodes a zinc finger protein that contains a jumonji domain and may play a role in hormone-dependent transcriptional activation. JMJD1A functions as a mono- and dimethylation-specific demethylase, binding iron and 浏-ketoglutarate as cofactors and demethylating Lysine 9 of Histone H3. This suggests that JMJD1A plays a central role in the histone code and participates in nuclear hormone receptor-based transcriptional regulation. In addition, JMJD1A plays an important role in the regulation of cell growth during development and in chromatin regulation. JMJD1A directly regulates the expression of TNP1 and Protamine 1 (proteins required for the proper packaging and condensation of sperm chromatin) and, therefore, plays an essential role in spermatogenesis.

Catalog Number: E10-30134

Amount: 100μg/100μl

Clone Number: 2E1

Species: Mouse IgG1 **MW:** 147kDa

Aliases: TSGA; JMJD1; JHDM2A; JHMD2A; JMJD1A; KIAA0742; DKFZp686A24246;

DKFZp686P07111; KDM3A

Entrez Gene: 55818

Immunogen: Purified recombinant fragment of human KDM3A expressed in E. Coli.

Storage: Store at 4° C, for long term storage, store at -20 $^{\circ}$ C.

Formulation: Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human

Tested Applications: WB, IF, ELISA. Not yet tested in other applications.

Application notes: WB: 1/500 - 1/2000, IF: 1/200 - 1/1000, ELISA: Propose dilution 1/10000.

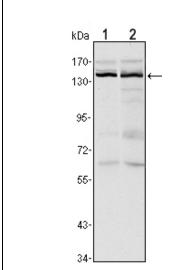


Figure 1: Western blot analysis using KDM3A mouse mAb against Hela (1) and HepG2 (2) cell lysate.

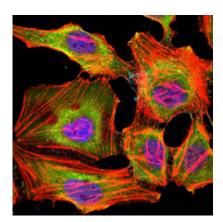


Figure 2: Immunofluorescence analysis of Hela cells using KDM3A mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.