

# **Product datasheet for AM06548SU-N**

#### OriGene Technologies, Inc.

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## KDM3A / JHDM2A (KDM3A) Mouse Monoclonal Antibody [Clone ID: 2E1]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 2E1

Applications: ELISA, IF, WB

Recommended Dilution: ELISA: 1/10000.

Western Blot: 1/500 - 1/2000.

Immunofluorescence on Paraffin Sections: 1/200 - 1/1000.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

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

**Specificity:** Recognizes KDM3A / JHDM2A

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% Sodium Azide.

**Conjugation:** Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** 147 kDa

**Gene Name:** lysine demethylase 3A

Database Link: Entrez Gene 55818 Human

Q9Y4C1



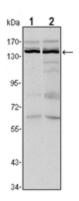
### Background:

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  $\square$ -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.

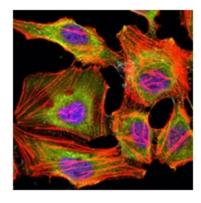
Synonyms:

JMJD1, JMJD1A, KIAA0742, TSGA

# **Product images:**



Western blot analysis using KDM3A antibody Cat.-No AM06548SU-N against Hela (1) and HepG2 (2) cell lysate.



Immunofluorescence analysis of Hela cells using KDM3A antibody Cat.-No AM06548SU-N (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.