

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human KDM4A in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human KDM4C is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human KDM4A Lys386-Ser514 Accession # AAH02558
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

KDM4A (Lysine [K]-specific demethylase 4A; also known as JMJD2A) is a 155-160 kDa member of the JHDM3 histone demethylase family of enzymes. It is ubiquitously expressed and interacts with the histone deacetylase proteins HDAC-1, -2, and -3. KDM4A specifically demethylates trimethylated lysines on histone H3 at Lys9 and Lys36. Transcriptional repression occurs when it interacts with NCOR1. Human KDM4A is 1064 amino acids (aa) in length (SwissProt #:O75164). It contains one jumonji N domain (aa 13-55), a catalytic jumonji C domain (aa 175-291), two PHD zinc finger regions (aa 709-855), and two TUDOR methylated-histone binding domains (aa 897-1011). Over aa 386-514, human KDM4A shares 93% amino acid sequence identity with mouse KDM4A.

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