

Anti-JMJD1A/KDM3A Antibody

Catalog Number: A03994-2

About KDM3A

The jumonji domain containing 1A protein (JMJD1A) was originally discovered as a testes specific gene, but has been found to be expressed in numerous tissues. JMJD1A is a histone demethylase and specifically demethylates mono- and dimethyl-H3K9. It has also been found to be a novel interaction partner with ER71, a transcription factor expressed in the testes of adult mice and during embryogenesis. JMJD1A is also a downstream gene of STAT3, a protein that has been found to be important in the maintenance of mouse embryonic stem (mES) cells, and decreased JMJD1A expression correlated with the differentiation of cultured mES cells following the removal of the cytokine LIF. These findings suggest that JMJD1A might be a critical signaling molecule underlying the maintenance of pluripotency in embryonic stem cells. At least two isoforms of JMJD1A are known to exist.

Overview

Product Name	Anti-JMJD1A/KDM3A Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-JMJD1A/KDM3A Antibody catalog # A03994-2. Tested in WB, IHC, ICC, IF, IP, ELISA applications. This antibody reacts with Human, Mouse.
Application	ELISA, IP, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg stabilizing protein and 50% glycerol *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	12 months from date of receipt at -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q9Y4C1

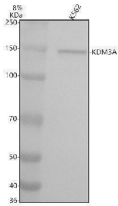
Technical Details

Immunogen	E.coli-derived human KDM3A recombinant protein (Position: T4-T359).
Form	Liquid
Concentration	500 ug/ml
Purification	Immunogen affinity purified.

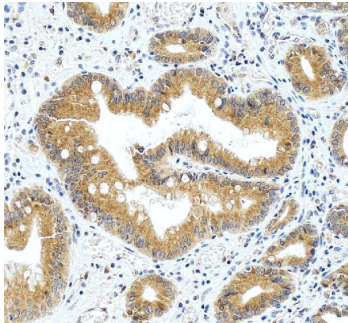
Suggested Dilutions

Western blot, 1:500-2000
Immunohistochemistry, 1:50-400
Immunocytochemistry/Immunofluorescence, 1:50-400
Immunoprecipitation, 1:50
ELISA, 1:100-1000

Anti-JMJD1A/KDM3A Antibody (A03994-2) Images



Western blot analysis of JMJD1A/KDM3A using anti-JMJD1A/KDM3A antibody (A03994-2). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human K562 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-JMJD1A/KDM3A antigen affinity purified polyclonal antibody (A03994-2) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for JMJD1A/KDM3A at approximately 150 kDa. The expected band size for JMJD1A/KDM3A is at 147 kDa.



IHC analysis of JMJD1A/KDM3A using anti-JMJD1A/KDM3A antibody (A03994-2). JMJD1A/KDM3A was detected in a paraffin-embedded section of human stomach cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-JMJD1A/KDM3A Antibody (A03994-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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Anti-JMJD1A/KDM3A Antibody

For Research Use Only. Not for use in diagnostic procedures.