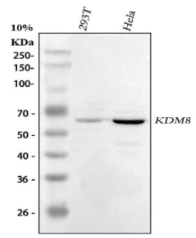
KDM8 Antibody / Lysine-specific demethylase 8 (FY12823)

Catalog No.	Formulation	Size
FY12823	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q8N371
Applications	Western Blot : 0.25-0.5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This KDM8 antibody is available for research use only.



Western blot analysis of KDM8 using anti-KDM8 antibody. Lane 1: human 293T whole cell lysates, Lane 2: human Hela 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-KDM8 antibody at 0.5 ug/ml overnight at 4oC, 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 was developed using enhanced chemiluminescent. A predominant band is detected at ~60 kDa in HeLa, consistent with full-length KDM8 migrating above its predicted ~47 kDa due to anomalous mobility and post-translational modification.

Description

KDM8 antibody detects Lysine-specific demethylase 8, a histone demethylase that regulates chromatin organization, transcription, and cell cycle progression. Encoded by the KDM8 gene on chromosome 16p12.1, this enzyme demethylates dimethylated lysine 36 on histone H3 (H3K36me2), a modification associated with transcriptional elongation and gene regulation. KDM8 plays an essential role in epigenetic control of gene expression, particularly during mitotic progression and differentiation.

KDM8, also known as JMJD5, is a member of the Jumonji C (JmjC) domain-containing family of Fe(II)- and 2-oxoglutarate-dependent oxygenases. It localizes to the nucleus and functions both as a histone demethylase and as a cofactor for cell cycle regulatory proteins such as CDK1. Through these activities, KDM8 coordinates chromatin dynamics and ensures proper metaphase alignment during mitosis.

The KDM8 antibody is widely used in epigenetics, developmental biology, and cancer research to study histone methylation control, transcriptional regulation, and chromatin remodeling. Western blot analysis detects a 47 kilodalton band corresponding to KDM8, while immunofluorescence reveals nuclear staining consistent with its chromatin-associated functions. This antibody enables examination of histone modification patterns and their effects on gene expression and cell division.

Aberrant expression of KDM8 has been linked to oncogenesis, particularly in breast and prostate cancers, where it promotes proliferation and cell cycle progression by modulating chromatin accessibility. KDM8 also interacts with p53 and ribosomal proteins to coordinate metabolic and stress responses. The KDM8 antibody provides a powerful tool for studying epigenetic regulation and transcriptional dynamics. NSJ Bioreagents offers this antibody validated for its applications, ensuring accurate detection in chromatin and gene regulation research.

Application Notes

Optimal dilution of the KDM8 antibody should be determined by the researcher.

Immunogen

E.coli-derived human KDM8 recombinant protein (Position: D4-D406) was used as the immunogen for the KDM8 antibody.

Storage

After reconstitution, the KDM8 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.