Recombinant KDM2A / FBXL11 protein



Catalog No: 31485, 31885

Expressed In: Baculovirus

Quantity: 20, 1000 μg

Concentration: 0.3 μg/μl

Source: Human

Buffer Contents: Full length recombinant FBXL11 / KDM2A protein was expressed in Sf9 cells and is supplied in 25 mM HEPES pH 7.5, 500 mM NaCl, 10% glycerol, and 0.5 mM TCEP.

Background: Lysine (K)-specific demethylase 2A (KDM2A), also known as FBXL11, JHDM1A, CXXC8, nucleates at CpG islands and specifically demethylates 'Lys-36' of histone H3, thereby playing a central role in histone code. Preferentially demethylates dimethylated H3 'Lys-36' residue while it has weak or no activity for mono- and trimethylated H3 'Lys-36'. May also recognize and bind to some phosphorylated proteins and promote their ubiquitination and degradation. Required to maintain the heterochromatic state. Associates with centromeres and represses transcription of small non-coding RNAs that are encoded by the clusters of satellite repeats at the centromere. Required to sustain centromeric integrity and genomic stability, particularly during mitosis.

Protein Details: Recombinant KDM2A / FBXL11 (accession number NP_036440.1) was expressed in Sf9 and contains an N-terminal FLAG-Tag with a molecular weight of 134 kDa. The recombinant protein is >75% pure by SDS-PAGE.

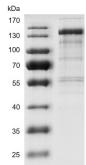
Application Notes: Recombinant KDM2A / FBXL11 is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.Recombinant KDM2A / FBXL11 is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.





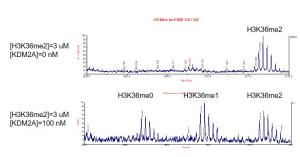


Recombinant KDM2A / FBXL11 protein gel.

KDM2A / FBXL11 protein was run on a 8% SDS-PAGE gel and stained with Coomassie blue.

MW: 128 kDa Purity: > 85%

MALDI-TOF for KDM2A / FBXL11 protein activity



 $3~\mu M$ H3K36me2 (21-44 aa) peptide was incubated with 0, 100 nM of KDM2A / FBXL11 protein in reaction buffer containing 50 mM HEPES-NaOH pH 7.5, 100 μM 2-oxoglutarate, 100 μM ascorbate, 50 μM (NH4)2Fe(SO4)2·6H2O, 1 mM TCEP for 2 hr at room temperature. Single H3K36me2 peptide was used as negative control. MALDI-TOF was used for detection.