

Datasheet for ABIN2669681

KDM5B Protein (full length) (DYKDDDDK Tag)[Go to Product page](#)**3** Images

Overview

Quantity:	20 µg
Target:	KDM5B
Protein Characteristics:	full length
Origin:	Human
Source:	Insect cells (Sf9)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KDM5B protein is labelled with DYKDDDDK Tag.
Application:	Enzyme Activity Assay (EAA), Screening Assay (ScA)

Product Details

Characteristics: Recombinant JARID1B / KDM5B (accession number NP_006609, full length) was expressed in Sf9 and contains an N-terminal FLAG tag with a molecular weight of 179.9 kDa.

Target Details

Target:	KDM5B
Alternative Name:	JARID1B / KDM5B (KDM5B Products)
Background:	Lysine (K)-specific demethylase 5B (KDM5B), also known as Jumonji, AT rich interactive domain 1B (JARID1B), is a histone demethylase that specifically demethylates lysine 4 of histone H3 (H3K4), thereby playing a central role in defining the histone code. KDM5B demethylates trimethylated, dimethylated and monomethylated H3K4. It does not demethylate histone H3K9 or H3K27. KDM5B functions as a transcriptional corepressor for FOXG1B and

Target Details

PAX9. KDM5B induces the proliferation of breast cancer cells by repressing tumor suppressor genes such as BRCA1 and HOXA5. In contrast, it may act as a tumor suppressor for melanoma.

Molecular Weight: 179.9 kDa

Pathways: [Warburg Effect](#)

Application Details

Application Notes: Recombinant JARID1B / KDM5B is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Specific Activity: H3K4me3 demethylase. Catalytic Rate: 20 turnovers/ enzyme molecule/ hour. Histone Demethylase Assay Conditions: 50 mM HEPES pH 7.5, 0.02 % Triton X100, 100 μ M 2OG, 100 μ M Ascorbate, 50 μ M (NH₄)₂Fe(SO₄)₂·6H₂O, 1 mM TCEP, 50 nM Recombinant JARID1B / KDM5B protein, and 3.3 μ M H3K4me3 (aa 1-21) peptide at 2 hours at room temperature. MALDI-TOF was used for detection.

Restrictions: For Research Use only

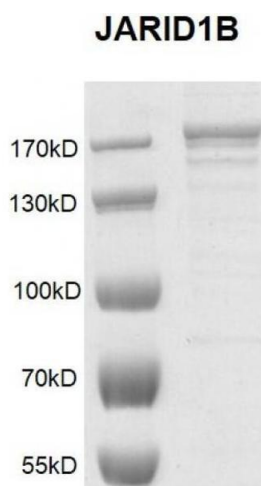
Handling

Handling Advice: Avoid repeated freeze/thaw cycles and keep on ice when not in storage.

Storage: -80 °C

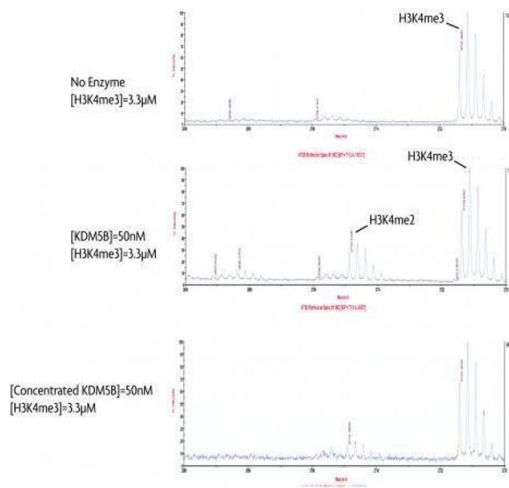
Storage Comment: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation.

Images



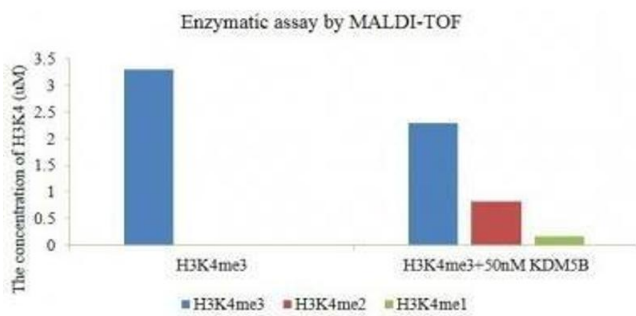
Western Blotting

Image 1. Recombinant JARID1B / KDM5B protein gel. JARID1B / KDM5B protein was run on an SDS-PAGE gel and stained with Coomassie blue.



Activity Assay

Image 2. JARID1B / KDM5B activity assay. Recombinant JARID1B / KDM5B activity measured using a demethylation assay. MALDI-TOF was used for detection.



Activity Assay

Image 3. Recombinant JARID1B / KDM5B enzymatic assay. Demethylase activity of JARID1B / KDM5B was measured with an enzymatic assay. MALDI-TOF was used for detection. Catalytic rate: 20 turnovers/enzyme/hour.