Datasheet for ABIN2669707

JMJD2D Protein (DYKDDDDK Tag)

3 Images

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Overview

Quantity:	20 µg
Target:	JMJD2D (KDM4D)
Origin:	Human
Source:	Baculovirus
Protein Type:	Recombinant
Purification tag / Conjugate:	This JMJD2D protein is labelled with DYKDDDDK Tag.
Application:	Enzyme Activity Assay (EAA), Screening Assay (ScA)

Product Details

Characteristics:	Recombinant JMJD2D / KDM4D (accession number NP_060509.2) was expressed in Sf9 cells and contains an N-terminal FLAG tag with an observed molecular weight of 63.2 kDa.

Target Details

Target:	JMJD2D (KDM4D)
Alternative Name:	JMJD2D / KDM4D (KDM4D Products)
Background:	KDM4D (lysine (K)-specific demethylase 4D), also known as JMJD2D (Jumonji Domain Containing 2D) is a protein that functions as a histone demethylase that preferentially demethylates di- and trimethylated lysine 9 residues of histone H3, while it has no activity on monomethylated H3K9 residues.
Molecular Weight:	63.2 kDa
Pathways:	Warburg Effect

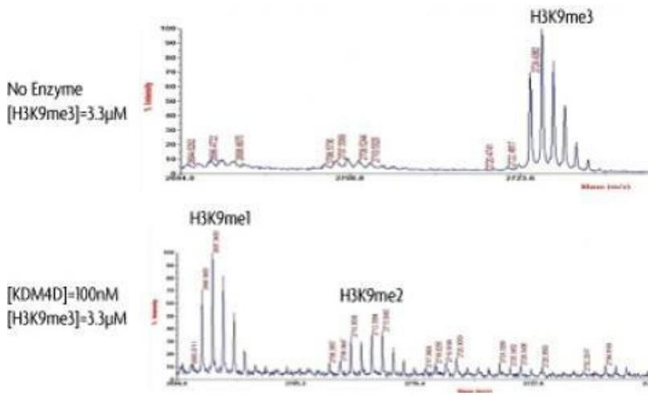
Application Details

Application Notes:	Recombinant JMJD2D / KDM4D is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Specific Activity: H3K9me3 demethylase. Histone Demethylase Assay Conditions: 50 mM HEPES pH 7.5, 0.02 % Triton X100, 100 µM 2OG, 100 µ M Ascorbate, 50 µM (NH4)2Fe(SO4)2•6H2O, 1 mM TCEP, 100 nM Recombinant JMJD2D / KDM4D protein, and 3.3 µM H3K9me3 (aa 1-21) peptide at 2 hours at room temperature. MALDI-TOF was used for detection.
Restrictions:	For Research Use only

Handling

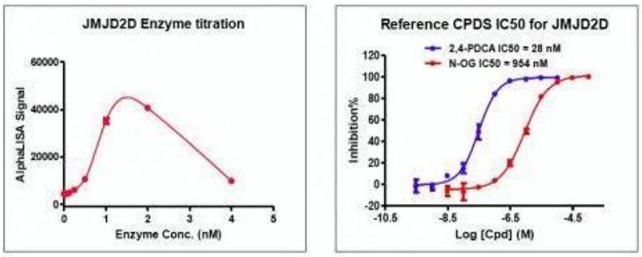
Handling Advice:	Avoid repeated freeze/thaw cycles and keep on ice when not in storage.
Storage:	-80 °C
Storage Comment:	Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation.

Images



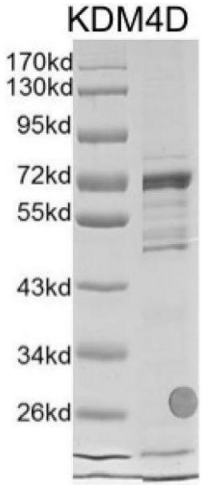
Activity Assay

Image 1. JMJD2D / KDM4D activity assay. Recombinant JMJD2D / KDM4D activity measured using a demethylation assay. MALDI-TOF was used for detection.



Screening Assay

Image 2. Recombinant JMJD2D / KDM4D activity using AlphaLISA. JMJD2D / KDM4D was used in an AlphaLISA assay to determine enzyme titration. An IC50 dose response assessment of reference compounds 2,4-PDCA and N-OG is shown. This data was generated and kindly provided courtesy of ChemPartner.



Western Blotting

Image 3. Recombinant JMJD2D / KDM4D protein gel. JMJD2D / KDM4D protein was run on an SDS-PAGE gel and stained with Coomassie blue.