Recombinant KDM5A protein (His tag)

Catalog Number	537663
Synonyms	Histone demethylase JARID1A; Jumonji/ARID domain-containing protein 1A; Retinoblastoma-binding protein 2; RBBP-2; [histone H3]-trimethyl-L-lysine(4) demethylase 5A
Species	Human
Expression System	E. coli
Accession	P29375
Molecular Weight	Predictes a molecular mass of 21.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	1-176
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-176 aa (P29375) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Lysine-specific demethylase 5A (KDM5A) fragment (residues 1-176) from Homo sapiens, encompassing the complete JmjN and ARID functional domains. This high-purity protein is an essential tool for investigating histone demethylase mechanisms, gene regulation, and epigenetic research. Lysine-specific demethylase 5A (KDM5A) is a histone demethylase that specifically targets trimethylated and dimethylated histone H3 at lysine-4 (H3K4me3/me2), playing a central role in epigenetic regulation. It functions in transcriptional regulation through DNA-binding to 5'-CCGCCC-3' motifs, influences cell differentiation via Hox protein regulation, and participates in circadian rhythm maintenance by coactivating CLOCK-BMAL1-mediated transcription. KDM5A localizes primarily to the nucleus and nucleolus, occupying promoters of genes involved in RNA metabolism and mitochondrial function. The provided fragment (1-176) contains the JmjN and ARID domains critical for its structural and functional integrity, enabling focused studies on domain-specific interactions and activities.