Recombinant JARD2 protein (His tag)

Catalog Number	538642
Synonyms	Jumonji/ARID domain-containing protein 2
Species	Human
Expression System	E. coli
Accession	Q92833
Molecular Weight	Predictes a molecular mass of 23.04 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	554-735
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 554-735 aa (Q92833) 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 Human JARID2/Jumonji Protein Fragment (554-735) - A high-purity protein fragment encompassing the critical JmjN and ARID domains of Jumonji/ARID domain-containing protein 2, designed for functional studies of epigenetic regulation and chromatin remodeling mechanisms. JARID2 (Jumonji/ARID domain-containing protein 2) is a crucial regulator of histone methyltransferase complexes that plays an essential role in embryonic development, including heart and liver development, neural tube fusion, and hematopoiesis. As an accessory subunit for the Polycomb repressive complex 2 (PRC2), it mediates recruitment of the complex to target genes and facilitates histone H3K27 trimethylation (H3K27me3), thereby playing a key role in stem cell differentiation and normal embryonic development. The protein also functions in cardiac cells to repress cyclin-D1 expression through activation of H3K9 methylation and acts as a transcriptional repressor of ANF via interactions with GATA4 and NKX2-5. JARID2 localizes to the nucleus where it colocalizes with the PRC2 complex on chromatin, participating in the negative regulation of cell proliferation signaling pathways.