Recombinant ARI5B protein (His tag)

Catalog Number	542691
Synonyms	ARID domain-containing protein 5B; MRF1-like protein; Modulator recognition factor 2; MRF-2
Species	Human
Expression System	E. coli
Accession	Q14865
Molecular Weight	Predictes a molecular mass of 12.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	318-411
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 318-411 aa (Q14865) 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 ARID5B Fragment (318-411) is a high-purity protein designed for studying the ARID domain's role in transcriptional regulation. This 94-amino acid fragment fully encompasses the ARID functional domain, making it an ideal tool for investigating DNA binding, adipogenesis, liver development, and smooth muscle differentiation mechanisms. ARID5B (AT-rich interactive domain-containing protein 5B) is a transcription coactivator that binds to the 5'-AATA[CT]-3' core sequence and plays critical roles in adipogenesis and liver development. It functions by forming a complex with phosphorylated PHF2, mediating histone demethylation at H3K9me2 to activate transcription of target genes. ARID5B acts as a coactivator of HNF4A in liver, regulates triglyceride metabolism in adipocytes, and may influence smooth muscle cell differentiation and proliferation. The protein is exclusively nuclear localized and has been shown to repress the cytomegalovirus enhancer. Its involvement in these fundamental biological processes makes it a significant target for metabolic and developmental research.