Recombinant ARI4A protein (His tag)

Catalog Number	546897
Synonyms	ARID domain-containing protein 4A; Retinoblastoma-binding protein 1; RBBP-1
Species	Human
Expression System	E. coli
Accession	P29374
Molecular Weight	Predictes a molecular mass of 13.12 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	309-406
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 309-406 aa (P29374) 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 ARID4A protein fragment (amino acids 309-406) encompassing the complete ARID domain. This high-purity fragment serves as an essential tool for investigating DNA-binding mechanisms, transcription factor modulation, and epigenetic regulation in cellular processes. ARID4A (AT-rich interactive domain-containing protein 4A) is a nuclear DNA-binding protein that modulates transcription factor activity, including retinoblastoma-associated protein (RB1) and androgen receptor (AR). It functions within repressor complexes such as mSin3A and participates in epigenetic regulation at imprinting centers. ARID4A plays critical roles in spermatogenesis as a transcriptional coactivator for AR, supports blood-testis barrier integrity through CLDN3 regulation, and contributes to myeloid homeostasis and hematopoiesis. Its nuclear localization and involvement in histone methylation underscore its importance in gene expression control and potential role as a leukemia suppressor.