Recombinant CHD1L protein (His tag)

Catalog Number	545344
Synonyms	Amplified in liver cancer protein 1
Species	Human
Expression System	E. coli
Accession	Q86WJ1
Molecular Weight	Predictes a molecular mass of 56.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 58 kDa band.

Product Information

Sequence Region	1-487
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 1-487 aa (Q86WJ1) 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 Chromodomain-helicase-DNA-binding protein 1-like (CHD1L) fragment (amino acids 1-487), encompassing the essential Helicase ATP-binding domain. This high-purity protein serves as a valuable tool for investigating ATP-dependent chromatin remodeling mechanisms, DNA damage response pathways, and helicase activity in vitro. CHD1L is an ATP-dependent chromatin remodeler that plays a critical role in DNA damage repair processes. The full-length protein localizes to the nucleus and chromosomes, where it is specifically recruited to DNA damage sites through interaction with poly-ADP-ribosylated histones. Upon activation by poly-ADP-ribose binding, CHD1L catalyzes nucleosome sliding away from DNA breaks in an ATP-dependent manner, facilitating chromatin reorganization during DNA repair. Its chromatin remodeling activity also promotes PARP2 removal from chromatin, highlighting its significance in maintaining genomic stability. The amplified expression of this protein in liver cancer further underscores its biological importance in cellular homeostasis and disease pathogenesis.