Recombinant CDC73 protein (His tag)

Catalog Number	542910
Synonyms	Cell division cycle protein 73 homolog; Hyperparathyroidism 2 protein
Species	Human
Expression System	E. coli
Accession	Q6P1J9
Molecular Weight	Predictes a molecular mass of 22.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	357-531
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 357-531 aa (Q6P1J9) 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 Parafibromin (CDC73) Fragment (357-531) is a highly stable and soluble protein fragment designed for structural and biochemical studies. This product offers researchers a reliable tool to investigate the tumor suppressor functions and transcriptional regulatory roles of Parafibromin, facilitating advanced research in cancer biology and gene expression mechanisms. Parafibromin, encoded by the CDC73 gene, is a critical tumor suppressor protein involved in transcriptional and post-transcriptional control pathways. It plays a key role in cell cycle progression through regulation of cyclin D1/PRAD1 expression and is a core component of the PAF1 complex (PAF1C), which mediates multiple RNA polymerase II-related functions. The PAF1C participates in transcriptional elongation, histone modifications (including H2B ubiquitination and H3K4 methylation), mRNA 3' end formation, and Wnt signaling pathways. It also contributes to hematopoiesis and leukemogenesis through interactions with KMT2A/MLL1-rearranged oncoproteins. Parafibromin localizes to the nucleus, where it connects PAF1C with cleavage and polyadenylation factors, underscoring its importance in gene expression regulation and its implications in hyperparathyroidism and cancer development.