Recombinant PCGF5 protein (His tag)

Catalog Number	540619
Synonyms	RING finger protein 159
Species	Human
Expression System	E. coli
Accession	Q86SE9
Molecular Weight	Predictes a molecular mass of 31.37 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	1-256
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-256 aa (Q86SE9) 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 PCGF5 (Polycomb group RING finger protein 5) fragment (residues 1-256) from Homo sapiens, designed for structural and biochemical studies. This stable, soluble unit represents a key functional domain involved in chromatin remodeling and transcriptional regulation, offering researchers a reliable tool for investigating Polycomb group protein mechanisms. PCGF5 is a component of the Polycomb group (PcG) multiprotein PRC1-like complex, which maintains the transcriptionally repressive state of genes, including Hox genes, during development. The complex functions through chromatin remodeling and histone modification, specifically mediating monoubiquitination of histone H2A at 'Lys-119' to heritably alter chromatin expressibility. PCGF5 regulates RNF2 ubiquitin ligase activity within this complex and plays a redundant role with PCGF3 in silencing one copy of the X chromosome in females. The protein is localized in the nucleus and nucleoplasm and is recruited by the non-coding RNA Xist to nuclear foci associated with the inactivated X chromosome. The fragment (residues 1-256) encompasses a stable domain critical for these functions, enabling focused research on its structural and mechanistic roles.