Recombinant APC1 protein (His tag)

Catalog Number	545911
Synonyms	APC1; Cyclosome subunit 1; Mitotic checkpoint regulator; Testis-specific gene 24 protein
Species	Human
Expression System	E. coli
Accession	Q9H1A4
Molecular Weight	Predictes a molecular mass of 33.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	1-279
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 1-279 aa (Q9H1A4) 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 Anaphase-promoting complex subunit 1 (APC1) fragment (residues 1-279) is a high-purity protein designed for structural and biochemical studies. This stable, soluble fragment represents a key functional region of APC1, enabling researchers to investigate its role in cell cycle regulation and ubiquitin ligase activity. Anaphase-promoting complex subunit 1 (APC1) is an essential component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through mitosis and the G1 phase of the cell cycle. The APC/C complex mediates ubiquitination and subsequent degradation of target proteins, primarily forming 'Lys-11'-linked polyubiquitin chains and, to a lesser extent, 'Lys-48'- and 'Lys-63'-linked chains. It also catalyzes assembly of branched 'Lys-11'-/'Lys-48'-linked ubiquitin chains on target proteins, playing a crucial role in maintaining proper cell cycle progression and mitotic checkpoint regulation.