Recombinant ANC2 protein (His tag)

Catalog Number	543851
Synonyms	APC2; Cyclosome subunit 2
Species	Human
Expression System	E. coli
Accession	Q9UJX6
Molecular Weight	Predictes a molecular mass of 59.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 65 kDa band.

Product Information

Sequence Region	219-718
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 219-718 aa (Q9UJX6) 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 2 (APC2) fragment (residues 219-718) is a high-quality protein product designed for structural and biochemical studies. This 500-amino acid fragment was computationally selected to ensure stability and solubility, making it ideal for investigating the catalytic mechanisms of the APC/C complex in cell cycle regulation. Anaphase-promoting complex subunit 2 (APC2) is a critical component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase essential for mitotic progression and G1 phase regulation. Together with ANAPC11, APC2 forms the catalytic core that mediates ubiquitination and degradation of target proteins, primarily generating 'Lys-11'-linked polyubiquitin chains with additional 'Lys-48' and 'Lys-63' linkages. The APC/C complex also assembles branched 'Lys-11'-/'Lys-48'-linked ubiquitin chains and plays roles in neuronal development, including synaptic vesicle clustering and presynaptic differentiation through CDC20-APC/C-mediated degradation of NEUROD2.