Recombinant CPPED protein (His tag)

Catalog Number	543482
Synonyms	Calcineurin-like phosphoesterase domain-containing protein 1; Complete S-transactivated protein 1
Species	Human
Expression System	E. coli
Accession	Q9BRF8
Molecular Weight	Predictes a molecular mass of 37.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	1-314
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 1-314 aa (Q9BRF8) 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 CPPED1 Fragment (1-314): A high-quality, soluble protein fragment of human Serine/threonine-protein phosphatase CPPED1, designed for structural and biochemical studies. This fragment retains key functional regions, enabling research into its role in dephosphorylating AKT at Ser-473 to regulate cell cycle progression and apoptosis. Serine/threonine-protein phosphatase CPPED1 (EC 3.1.3.16) is a cytoplasmic enzyme that specifically dephosphorylates AKT family kinases at 'Ser-473', a critical regulatory site. This activity inhibits cell cycle progression and promotes apoptosis, positioning CPPED1 as a key modulator of cellular survival pathways. Additionally, it may play an inhibitory role in glucose uptake by adipocytes, suggesting relevance in metabolic studies. The full-length protein is localized in the cytoplasm, as supported by experimental evidence. The recombinant fragment (amino acids 1-314) encompasses the calcineurin-like phosphoesterase domain, providing a stable and soluble unit ideal for investigating phosphatase mechanisms and interactions.