Recombinant SIN1 protein (His tag)

Catalog Number	548090
Synonyms	TORC2 subunit MAPKAP1; Mitogen-activated protein kinase 2-associated protein 1; Stress-activated map kinase-interacting protein 1; SAPK-interacting protein 1; mSIN1
Species	Human
Expression System	E. coli
Accession	Q9BPZ7
Molecular Weight	Predictes a molecular mass of 51.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	85-522
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 85-522 aa (Q9BPZ7) 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 MAPKAP1 Protein Fragment (aa 85-522) - A high-purity protein fragment encompassing the complete CRIM and SIN1-type PH domains of mTORC2 subunit MAPKAP1. This fragment serves as an essential research tool for investigating mTORC2 complex assembly, substrate recognition, and cellular signaling pathways in growth factor response and cytoskeletal organization. MAPKAP1 (Mitogen-activated protein kinase 2-associated protein 1), also known as mSIN1, is a critical component of the mechanistic target of rapamycin complex 2 (mTORC2). This complex functions as a central signaling hub that transduces growth factor signals to regulate key cellular processes including proliferation, cytoskeletal organization, lipogenesis, and anabolic output. As a substrate adapter within mTORC2, MAPKAP1 specifically recognizes and binds AGC protein kinase family members (including AKT, PKC, and SGK1) for phosphorylation by MTOR, thereby activating these downstream effectors. The protein localizes to multiple membrane compartments including the plasma membrane, endoplasmic reticulum, endosomes, lysosomes, and Golgi apparatus, where mTORC2 complex activity is regulated. The selected fragment (aa 85-522) contains the functionally critical CRIM and SIN1-type PH domains, making it particularly valuable for studying domain-specific interactions and mTORC2-mediated signaling mechanisms.