Recombinant SHPRH protein (His tag)

Catalog Number	545001
Synonyms	RING-type E3 ubiquitin transferase SHPRH; SNF2, histone-linker, PHD and RING finger domain-containing helicase
Species	Human
Expression System	E. coli
Accession	Q149N8
Molecular Weight	Predictes a molecular mass of 49.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	100-514
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 100-514 aa (Q149N8) 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 fragment of human E3 ubiquitin-protein ligase SHPRH (residues 100-514), encompassing key functional domains including the Helicase ATP-binding region. This high-purity protein is an essential tool for investigating DNA repair mechanisms, ubiquitin transfer, and helicase activity in controlled in vitro studies. E3 ubiquitin-protein ligase SHPRH is a critical human enzyme involved in DNA damage response and repair pathways. It functions by accepting ubiquitin from the UBE2N-UBE2V2 E2 complex and transferring it to 'Lys-164' of PCNA (proliferating cell nuclear antigen), which has been previously monoubiquitinated by UBE2A/B-RAD18. This activity promotes the formation of non-canonical poly-ubiquitin chains linked through 'Lys-63', facilitating DNA repair processes under genotoxic stress conditions. The protein's role in maintaining genomic stability makes it a significant target for cancer research and DNA damage response studies.