Recombinant SPSB3 protein (His tag)

Catalog Number	540532
Synonyms	SSB-3
Species	Human
Expression System	E. coli
Accession	Q6PJ21
Molecular Weight	Predictes a molecular mass of 30.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	63-321
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 63-321 aa (Q6PJ21) 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 SPRY domain-containing SOCS box protein 3 (SSB-3) fragment (residues 63-321) is a high-purity protein designed for studying the B30.2/SPRY and SOCS box domains. This fragment serves as an essential tool for investigating ubiquitin-mediated protein degradation pathways and substrate recognition mechanisms in cellular regulation. The full-length SPRY domain-containing SOCS box protein 3 (SSB-3), encoded by the SPSB3 gene in humans, functions as a substrate-recognition component of the cullin-5-RING E3 ubiquitin-protein ligase complex (ECS/CRL5 complex). This complex mediates 'Lys-48'-linked ubiquitination and subsequent proteasomal degradation of target proteins, including CGAS and phosphorylated SNAI1. Nuclear localization of SPSB3 increases during interphase, where it specifically recognizes and binds nucleosome-bound CGAS, facilitating its degradation during G1 and G2 phases to maintain low intranuclear CGAS levels before mitosis. These activities highlight SSB-3's critical role in cell cycle regulation and protein turnover pathways.