Recombinant SPSB1 protein (His tag)

Catalog Number	540947
Synonyms	SSB-1
Species	Human
Expression System	E. coli
Accession	Q96BD6
Molecular Weight	Predictes a molecular mass of 32.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	1-273
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-273 aa (Q96BD6) 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 1 (SSB-1) fragment (amino acids 1-273) is a high-purity protein designed for studying the B30.2/SPRY and SOCS box domains. This product supports research into ubiquitin-mediated protein degradation pathways and nitric oxide regulation in macrophages. SSB-1, encoded by the SPSB1 gene, functions as a substrate recognition component in SCF-like ECS E3 ubiquitin ligase complexes, targeting proteins like inducible nitric oxide synthase (NOS2) for ubiquitination and proteasomal degradation. By degrading NOS2, it negatively regulates nitric oxide production, limiting cellular toxicity in activated macrophages. The protein localizes to the cytoplasm and cytosol, where it bridges NOS2 with E3 ligase components ELOC and CUL5. The recombinant fragment (1-273) includes the complete B30.2/SPRY and SOCS box domains, enabling focused investigation into their roles in substrate recognition and protein degradation mechanisms.