Recombinant WSB1 protein (His tag)

Catalog Number	541656
Synonyms	WSB-1; SOCS box-containing WD protein SWiP-1
Species	Human
Expression System	E. coli
Accession	Q9Y6I7
Molecular Weight	Predictes a molecular mass of 49.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	1-421
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 1-421 aa (Q9Y6I7) 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 WSB1 Protein Fragment (1-421) is a high-quality, purified protein designed for studying the SOCS box domain of WD repeat and SOCS box-containing protein 1. This fragment is an essential tool for researchers investigating ubiquitin ligase complexes, protein degradation pathways, and regulatory mechanisms involving targets like type II iodothyronine deiodinase (DIO2) and HIPK2. WD repeat and SOCS box-containing protein 1 (WSB-1) functions as a probable substrate-recognition component of a SCF-like ECS E3 ubiquitin ligase complex. It mediates the ubiquitination and subsequent proteasomal degradation of specific target proteins, including type II iodothyronine deiodinase (DIO2) and homeodomain-interacting protein kinase 2 (HIPK2), conferring constitutive instability to HIPK2. This protein plays a critical role in cellular protein turnover and signaling regulation, with implications in thyroid hormone metabolism and kinase activity control. The provided fragment encompasses the SOCS box domain, enabling focused studies on its substrate recognition and ubiquitin ligase functions.