Recombinant ASB9 protein (His tag)

Catalog Number	545661
Synonyms	ASB-9
Species	Human
Expression System	E. coli
Accession	Q96DX5
Molecular Weight	Predictes a molecular mass of 33.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	1-294
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-294 aa (Q96DX5) 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 ASB-9 (1-294) is a high-purity protein fragment encompassing the complete SOCS box domain of Ankyrin repeat and SOCS box protein 9. This expertly engineered construct serves as an essential tool for investigating the ubiquitin ligase complex formation and substrate recognition mechanisms critical for cellular protein degradation pathways. Ankyrin repeat and SOCS box protein 9 (ASB-9) functions as the substrate-recognition component of a cullin-5-RING E3 ubiquitin-protein ligase complex (ECS/CRL5 complex), which mediates target protein ubiquitination and subsequent proteasomal degradation. Specifically, the ECS(ASB-9) complex catalyzes ubiquitination of creatine kinases CKB and CKMT1A, playing a crucial role in regulating cellular energy metabolism. The protein localizes to the mitochondrion, indicating its importance in mitochondrial function and energy regulation. Isoform 2 has been identified as a potential negative regulator that does not interact with the Elongin BC complex, suggesting complex regulatory mechanisms within this protein family.