Recombinant TRIP4 protein (His tag)

Catalog Number	547351
Synonyms	ASC-1; Thyroid receptor-interacting protein 4; TR-interacting protein 4; TRIP-4
Species	Human
Expression System	E. coli
Accession	Q15650
Molecular Weight	Predictes a molecular mass of 18.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	430-581
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 430-581 aa (Q15650) 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 Activating Signal Cointegrator 1 (ASC-1) fragment (residues 430-581) is a high-purity protein tool designed for studying the ASCH domain's specific functions. This fragment enables targeted investigation of ASC-1's role in transcription coactivation and ribosome quality control pathways, providing researchers with a precise molecular tool for domain-specific functional analysis. Activating Signal Cointegrator 1 (ASC-1), also known as Thyroid receptor-interacting protein 4 (TRIP4), is a multifunctional transcription coactivator that associates with nuclear receptors, transcriptional coactivators including EP300, CREBBP and NCOA1, and basal transcription factors like TBP and TFIIA to facilitate nuclear receptor-mediated transcription. It plays important roles in thyroid hormone receptor, estrogen receptor, and androgen receptor transactivation, and is involved in the transactivation of NF-kappa-B, SRF and AP1 pathways. Additionally, ASC-1 functions as part of the RQC trigger complex that activates the ribosome quality control pathway for degrading nascent peptide chains during problematic translation. The protein localizes to both nucleus and cytoplasm, with nuclear localization under normal conditions and cytoplasmic redistribution during serum deprivation, and also shows centrosomal localization through interaction with NEK6. The 430-581 fragment specifically contains the ASCH domain, making it valuable for studying domain-specific functions in these complex regulatory pathways.