Recombinant INT14 protein (His tag)

Catalog Number	545757
Synonyms	von Willebrand factor A domain-containing protein 9
Species	Human
Expression System	E. coli
Accession	Q96SY0
Molecular Weight	Predictes a molecular mass of 32.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	1-277
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 1-277 aa (Q96SY0) 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 Integrator complex subunit 14 (INTS14) fragment (amino acids 1-277) is a high-purity protein designed for functional studies. This fragment fully encompasses the von Willebrand factor A (VWFA) domain, making it an ideal tool for investigating domain-specific roles in RNA polymerase II transcription termination and promoter-proximal quality control mechanisms. Integrator complex subunit 14 (INTS14) is a critical component of the integrator complex, a multiprotein assembly that terminates RNA polymerase II (Pol II) transcription near gene promoters. The complex acts as a quality checkpoint during elongation by driving premature termination of unfavorably configured transcripts through three key mechanisms: dephosphorylation of Pol II's C-terminal domain (CTD) and SUPT5H/SPT5, endonucleolytic degradation of nascent RNA, and promotion of Pol II release from DNA. INTS14 specifically resides within the integrator tail module, serving as a platform for transcription factor recruitment at promoters. The protein is also involved in terminating non-coding RNA synthesis, including enhancer RNAs, small nuclear RNAs, telomerase RNAs, and long non-coding RNAs. INTS14 localizes to the nucleus, consistent with its transcriptional regulatory functions.