Recombinant INT12 protein (His tag)

Catalog Number	540959
Synonyms	Int12; PHD finger protein 22
Species	Human
Expression System	E. coli
Accession	Q96CB8
Molecular Weight	Predictes a molecular mass of 10.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	151-222
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 151-222 aa (Q96CB8) 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 12 (INTS12) Fragment (aa 151-222) - A high-quality protein fragment derived from the Integrator complex subunit 12, specifically designed for structural and biochemical studies. This 72-amino acid fragment represents a stable, soluble region ideal for investigating the molecular mechanisms of RNA polymerase II transcription termination and transcriptional quality control. Integrator Complex Subunit 12 (INTS12), also known as PHD finger protein 22, is a crucial component of the integrator complex that regulates RNA polymerase II transcription termination in the promoter-proximal region of genes. This multiprotein complex serves as a quality checkpoint during transcription elongation by driving premature termination of unfavorably configured transcripts through three key mechanisms: catalyzing dephosphorylation of the C-terminal domain of Pol II subunit POLR2A/RPB1 and SUPT5H/SPT5, degrading nascent RNA transcripts via endonuclease activity, and promoting Pol II release from DNA. The integrator complex also terminates non-coding Pol II transcripts including enhancer RNAs, small nuclear RNAs, telomerase RNAs, and long non-coding RNAs. Additionally, INTS12 mediates recruitment of cytoplasmic dynein to the nuclear envelope. The protein is localized to the nucleus, where it performs these essential transcriptional regulatory functions.