Recombinant ING5 protein (His tag)

Catalog Number	543290
Synonyms	p28ING5
Species	Human
Expression System	E. coli
Accession	Q8WYH8
Molecular Weight	Predictes a molecular mass of 15.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	1-117
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 1-117 aa (Q8WYH8) 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 Inhibitor of growth protein 5 (p28ING5) fragment (amino acids 1-117) is a highly stable and soluble protein unit ideal for structural biology and biochemical studies. This carefully selected fragment maintains key functional characteristics of the full-length protein, providing researchers with a reliable tool for investigating chromatin regulation and cell cycle control mechanisms. Inhibitor of growth protein 5 (ING5) is a crucial nuclear protein that functions as a component of the HBO1 and MOZ/MORF histone acetyltransferase complexes. It specifically mediates acetylation of histone H3 at Lys-14 (H3K14ac) and contributes to histone H4 acetylation, playing a fundamental role in chromatin remodeling and epigenetic regulation. Through these chromatin modifications, ING5 regulates DNA replication and acts as a transcriptional coactivator. The protein demonstrates significant biological importance by inhibiting cell growth, inducing S-phase progression delays, and enhancing Fas-induced apoptosis in an INCA1-dependent manner. ING5 localizes to the nucleus and chromosomes, particularly at transcription start sites, highlighting its central role in gene expression regulation and cellular proliferation control.