Recombinant FOXA3 protein (His tag)

Catalog Number	547091
Synonyms	HNF-3-gamma; HNF-3G; Fork head-related protein FKH H3; Forkhead box protein A3; Transcription factor 3G; TCF-3G
Species	Human
Expression System	E. coli
Accession	P55318
Molecular Weight	Predictes a molecular mass of 11.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	115-199
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 115-199 aa (P55318) 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	Introducing the recombinant human Hepatocyte Nuclear Factor 3-gamma (HNF-3-gamma, FOXA3) fragment (amino acids 115-199), a stable and soluble protein unit designed for structural and biochemical studies. This fragment, derived from the pioneering transcription factor FOXA3, enables researchers to investigate chromatin remodeling and transcriptional regulation mechanisms with high reliability. Hepatocyte Nuclear Factor 3-gamma (HNF-3-gamma), encoded by the FOXA3 gene, functions as a 'pioneer' transcription factor that opens compacted chromatin for other proteins by interacting with nucleosomal core histones. It activates transcription of key liver genes such as AFP, albumin, and PEPCK, and plays roles in glucose homeostasis by binding to the G6PC1 promoter. Additionally, it regulates CYP3A4 and CYP3A7 transcription and is implicated in neuronal-specific transcription and spermatogenesis. The protein is localized to the nucleus, underscoring its direct involvement in gene expression control.