Recombinant HSF5 protein (His tag)

Catalog Number	549493
Synonyms	HSF 5; Heat shock transcription factor 5; HSTF 5
Species	Human
Expression System	E. coli
Accession	Q4G112
Molecular Weight	Predictes a molecular mass of 17.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	1-145
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-145 aa (Q4G112) 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 HSF5 protein fragment (amino acids 1-145), a stable and soluble unit derived from human Heat Shock Factor Protein 5. This fragment is expertly designed for structural and biochemical studies, supporting research into transcription factors critical for male fertility and spermatogenesis. Heat Shock Factor Protein 5 (HSF5) is a DNA-binding transcription factor essential for male fertility, spermatogenesis, and meiotic prophase progression in spermatocytes under non-stress conditions. It positively and negatively regulates gene expression to ensure progression beyond the pachytene stage in spermatocytes and plays a key role in meiotic sex chromosome remodeling and silencing via regulation of SMARCA4. HSF5 is localized in the nucleus and chromosomes, with primary expression observed in the XY body of pachytene spermatocytes, highlighting its importance in germline development.