Recombinant HSF4 protein (His tag)

Catalog Number	539221
Synonyms	HSF 4; hHSF4; Heat shock transcription factor 4; HSTF 4
Species	Human
Expression System	E. coli
Accession	Q9ULV5
Molecular Weight	Predictes a molecular mass of 23.85 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	1-194
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 1-194 aa (Q9ULV5) 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 Heat Shock Factor Protein 4 (HSF4) Fragment (aa 1-194) is a high-purity, stable protein designed for structural and functional studies. This fragment, derived from the full-length HSF4 transcription factor, retains key properties for investigating DNA-binding mechanisms, cellular stress responses, and lens development pathways. Heat Shock Factor Protein 4 (HSF4) is a transcription factor in Homo sapiens that specifically binds heat shock promoter elements (HSE) and plays critical roles in cellular stress response, DNA repair via RAD51 regulation, and eye lens development. It facilitates denucleation and organelle degradation during lens fiber cell differentiation, ensuring lens transparency, and may stabilize p53/TP53 in lens cells. HSF4 localizes to the nucleus and exists in functionally distinct isoforms: HSF4A acts as a transcriptional repressor, while HSF4B serves as a transcriptional activator, influencing targets such as alpha-crystallin B chain and DNASE2B. The provided fragment (aa 1-194) represents a soluble, stable region ideal for exploring HSF4's biochemical and structural characteristics.