Recombinant FOXD3 protein (His tag)

Catalog Number	548488
Synonyms	HNF3/FH transcription factor genesis
Species	Human
Expression System	E. coli
Accession	Q9UJU5
Molecular Weight	Predictes a molecular mass of 15.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	139-253
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 139-253 aa (Q9UJU5) 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 FOXD3 (139-253) Fragment: A high-quality, stable protein fragment derived from the Forkhead box protein D3, designed for structural and biochemical studies. This 115-amino acid fragment offers a soluble and functional unit ideal for investigating transcriptional regulation and neural crest development mechanisms. Forkhead box protein D3 (FOXD3) is a human transcription factor that binds to the DNA consensus sequence 5'-A[AT]T[AG]TTTGTTT-3', functioning as both a transcriptional repressor and activator. It plays critical roles in development by promoting neural crest cell formation from neural tube progenitors, restricting neural progenitor cells to the neural crest lineage while suppressing interneuron differentiation, and maintaining pluripotent cells during early embryogenesis. Additionally, FOXD3 negatively regulates the transcriptional repressor RHIT/ZNF205. The protein is localized to the nucleus, underscoring its direct involvement in gene expression control. This recombinant fragment (residues 139-253) was selected for its stability and solubility, enabling detailed analysis of FOXD3's functional domains without the complexities of the full-length protein.