Recombinant FOXD1 protein (His tag)

Catalog Number	540378
Synonyms	Forkhead-related protein FKHL8; Forkhead-related transcription factor 4; FREAC-4
Species	Human
Expression System	E. coli
Accession	Q16676
Molecular Weight	Predictes a molecular mass of 13.71 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	123-224
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 123-224 aa (Q16676) 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	This product is a recombinant fragment of the human Forkhead box protein D1 (FOXD1), spanning residues 123-224. This 102-amino acid fragment has been computationally optimized for stability and solubility, making it an ideal tool for structural studies and biochemical assays investigating FOXD1's role as a key transcription factor in developmental processes. Forkhead box protein D1 (FOXD1) is a transcription factor that regulates gene expression in multiple developmental contexts, including the establishment of positional identity in the retina, regionalization of the optic chiasm, kidney morphogenesis, and neuralization of ectodermal cells. It has been specifically implicated in the transcriptional activation of genes such as PGF and C3. FOXD1 is localized to the nucleus, consistent with its function in DNA binding and transcriptional regulation.