# Recombinant FOXE3 protein (His tag)

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| **Catalog Number** | 544927 |
| **Synonyms** | Forkhead-related protein FKHL12; Forkhead-related transcription factor 8; FREAC-8 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q13461 |
| **Molecular Weight** | Predictes a molecular mass of 13.37 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band. |

## Product Information

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| **Sequence Region** | 70-170 |
| **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 70-170 aa (Q13461) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Human FOXE3 Protein Fragment (70-170) is a high-quality, stable, and soluble protein fragment derived from the Forkhead box protein E3 (FOXE3), a key transcription factor involved in lens development and eye morphogenesis. This fragment is ideal for structural studies, biochemical assays, and functional investigations in ocular biology research.<br>The full-length Forkhead box protein E3 (FOXE3) is a transcription factor that plays a critical role in regulating lens epithelial cell growth by controlling proliferation, apoptosis, and cell cycle progression. It is essential for proper lens development, including lens vesicle closure, separation from the ectoderm, and maintaining the balance between lens fiber cells and anterior lens epithelium. FOXE3 also regulates DNAJB1 expression, which is vital for anterior segment eye development. The protein localizes to the nucleus, where it exerts its transcriptional functions. This recombinant fragment represents a stable, soluble region selected for its suitability in experimental applications, supporting research into FOXE3's mechanisms in ocular health and disease. |