Recombinant HTF4 protein (His tag)

Catalog Number	541085
Synonyms	TCF-12; Class B basic helix-loop-helix protein 20; bHLHb20; DNA-binding protein HTF4; E-box-binding protein; Transcription factor HTF-4
Species	Human
Expression System	E. coli
Accession	Q99081
Molecular Weight	Predictes a molecular mass of 10.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	567-640
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 567-640 aa (Q99081) 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 recombinant protein product features a 74-amino acid fragment (residues 567-640) of human Transcription factor 12 (TCF-12), specifically encompassing the complete basic helix-loop-helix (bHLH) domain. This fragment serves as an essential tool for researchers investigating the DNA-binding and transcriptional regulation functions of this critical transcription factor. Transcription factor 12 (TCF-12) is a transcriptional regulator that plays a key role in initiating neuronal differentiation. It functions by binding to E-box DNA sequences (5'-CANNTG-3') to activate transcription. Recent research suggests TCF-12 may be involved in the regulatory network governing development of the GnRH axis, highlighting its importance in neurodevelopmental processes. As a nuclear protein, TCF-12 performs its regulatory functions within the cell nucleus, making it a central component of gene expression control mechanisms in human cells.