Recombinant ITF2 protein (His tag)

Catalog Number	539802
Synonyms	TCF-4; Class B basic helix-loop-helix protein 19; bHLHb19; Immunoglobulin transcription factor 2; ITF-2; SL3-3 enhancer factor 2; SEF-2
Species	Human
Expression System	E. coli
Accession	P15884
Molecular Weight	Predictes a molecular mass of 10.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	553-627
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 553-627 aa (P15884) 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 TCF-4 (Transcription Factor 4) Fragment (aa 553-627) is a high-purity protein designed for studying the bHLH domain's role in transcriptional regulation and neuronal differentiation. This fragment serves as an essential tool for investigating DNA binding and activation mechanisms in cellular processes. Transcription factor 4 (TCF-4), also known as bHLHb19 or ITF-2, is a key regulator that binds to immunoglobulin enhancer Mu-E5/KE5 motifs and E-box sequences (5'-CANNTG-3') to activate transcription. It preferentially recognizes 5'-ACANNTGT-3' or 5'-CCANNTGG-3' motifs and plays a critical role in initiating neuronal differentiation, including activation of the somatostatin receptor 2 initiator element. TCF-4 is localized to the nucleus, where it orchestrates gene expression programs essential for cellular development and function.