Recombinant KLF10 protein (His tag)

Catalog Number	540236
Synonyms	EGR-alpha; Transforming growth factor-beta-inducible early growth response protein 1; TGFB-inducible early growth response protein 1; TIEG-1
Species	Human
Expression System	E. coli
Accession	Q13118
Molecular Weight	Predictes a molecular mass of 14.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	367-480
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 367-480 aa (Q13118) 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 protein fragment of Krueppel-like factor 10 (KLF10), also known as TGFB-inducible early growth response protein 1 (TIEG-1), spanning residues 367–480. The fragment is engineered for stability and solubility, making it ideal for structural studies, biochemical assays, and circadian rhythm or metabolic pathway research. Krueppel-like factor 10 (KLF10) is a transcriptional repressor in humans that binds to the 5'-GGTGTG-3' consensus sequence. It plays a critical role in regulating the circadian clock by repressing the transcriptional activity of ARTNL/BMAL1, a core clock component, and influences genes involved in hepatic lipogenesis, gluconeogenesis, and glycolysis. Additionally, KLF10 may contribute to cell cycle regulation. The protein is localized to the nucleus, consistent with its function in gene expression control.