Recombinant TLE4 protein (His tag)

Catalog Number	542554
Synonyms	Grg-4; Groucho-related protein 4
Species	Human
Expression System	E. coli
Accession	Q04727
Molecular Weight	Predictes a molecular mass of 37.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	446-773
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 446-773 aa (Q04727) 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	Introducing the recombinant human Transducin-like enhancer protein 4 (Grg-4) fragment (residues 446-773), a high-quality protein product designed for structural and biochemical studies. This 328-amino acid fragment represents a stable, soluble unit of TLE4, optimized for research into transcriptional corepressor mechanisms and Wnt signaling pathways. Transducin-like enhancer protein 4 (TLE4) is a transcriptional corepressor in humans that interacts with multiple transcription factors to modulate gene expression. It plays a critical role in inhibiting transcriptional activation by PAX5 and by CTNNB1 and TCF family members within the Wnt signaling cascade. TLE4 is also essential for the repressor functions of SIX3 during eye development and contributes to the regulation of gonadotropin-releasing hormone receptor (GNRHR) and glycoprotein hormone alpha subunit (CGA) expression. Located in the nucleus, TLE4 functions as part of the Groucho-related protein family, where its activity can be influenced by association with dominant-negative AES. The provided fragment (446-773) offers a defined region for investigating these core molecular interactions without domain complexities.