Recombinant TLE6 protein (His tag)

Catalog Number	545957
Species	Human
Expression System	E. coli
Accession	Q9H808
Molecular Weight	Predictes a molecular mass of 34.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	272-572
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 272-572 aa (Q9H808) 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 Transducin-like enhancer protein 6 (TLE6) fragment (residues 272-572) is a high-quality protein product designed for structural and biochemical studies. This 301-amino acid fragment was computationally selected to ensure stability and solubility, making it an ideal tool for investigating the functional mechanisms of TLE6 in early embryonic development and transcriptional regulation. Transducin-like enhancer protein 6 (TLE6), encoded by the TLE6 gene in Homo sapiens, is a critical component of the subcortical maternal complex (SCMC), which plays a key role in early embryonic development. The SCMC acts as a structural constituent of cytoplasmic lattices in oocytes and preimplantation embryos, storing maternal proteins essential for epigenetic reprogramming and preventing their degradation or premature activation. TLE6 also contributes to spermatogenesis by regulating spermatogonia proliferation and cell cycle progression. Additionally, it functions as a transcriptional corepressor, suppressing FOXG1/BF-1-mediated repression to promote cortical neuron differentiation and modulating NFATC1-mediated gene expression in conjunction with PAX6. TLE6 is primarily localized in the cytoplasm, where it forms part of cytoplasmic lattices, and can also be found in the nucleus, highlighting its diverse roles in cellular processes.