Recombinant SOLH1 protein (His tag)

Catalog Number	540459
Species	Human
Expression System	E. coli
Accession	Q5JUK2
Molecular Weight	Predictes a molecular mass of 11.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	51-138
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 51-138 aa (Q5JUK2) 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 SOHLH1 (51-138) Protein Fragment is a high-purity, functional protein fragment encompassing the bHLH domain of Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 1. This 88-amino acid fragment is an essential tool for investigating the transcriptional regulation mechanisms in germline differentiation, offering researchers a targeted reagent for domain-specific functional studies. Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 1 (SOHLH1) is a crucial transcription regulator in both male and female germline development. It functions by suppressing genes involved in spermatogonial stem cell maintenance while promoting genes essential for spermatogonial differentiation. In oogenesis, SOHLH1 coordinates oocyte differentiation processes without affecting meiosis I progression. The protein localizes to both the cytoplasm and nucleus, consistent with its role as a transcriptional regulator. The bHLH domain contained within this recombinant fragment is critical for DNA binding and protein dimerization, making this product particularly valuable for studying the molecular mechanisms underlying germ cell development and differentiation.