Recombinant SOLH2 protein (His tag)

Catalog Number	549944
Species	Human
Expression System	E. coli
Accession	Q9NX45
Molecular Weight	Predictes a molecular mass of 10.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	200-272
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 200-272 aa (Q9NX45) 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 SOHLH2 (200-272) is a high-purity protein fragment encompassing the essential basic helix-loop-helix (bHLH) domain of Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 2. This fragment serves as a targeted tool for investigating the transcriptional regulation mechanisms in germline differentiation, enabling focused studies on domain-specific functions without interference from the full-length protein's complexity. Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 2 (SOHLH2), encoded by the SOHLH2 gene in Homo sapiens, functions as a key transcription regulator in both male and female germline differentiation. It suppresses genes critical for spermatogonial stem cell maintenance while activating those necessary for spermatogonial progression. In oogenesis, it coordinates oocyte differentiation independently of meiosis I. The protein localizes to both the nucleus and cytoplasm, with nuclear translocation being dependent on SOHLH1 expression, highlighting its role in dynamic regulatory processes during gametogenesis.