Recombinant PROX1 protein (His tag)

Catalog Number	540908
Synonyms	Homeobox prospero-like protein PROX1; PROX-1
Species	Human
Expression System	E. coli
Accession	Q92786
Molecular Weight	Predictes a molecular mass of 20.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	579-737
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 579-737 aa (Q92786) 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 PROX1 (Prospero homeobox protein 1) Fragment (aa 579-737) – a high-purity protein fragment encompassing the full Prospero domain, designed for targeted studies of transcription factor function in developmental processes and circadian regulation. Prospero homeobox protein 1 (PROX1) is a key transcription factor in human development, critically involved in cell fate determination, gene regulation, and progenitor cell control across multiple organs. It plays essential roles in neurogenesis and the development of the heart, eye lens, liver, pancreas, and lymphatic system. PROX1 also regulates circadian rhythm by repressing transcription of retinoid-related orphan receptors (RORA/G) and their target genes, including core clock components like BMAL1, NPAS2, and CRY1. The protein is localized to the nucleus, where RORG promotes its nuclear retention, enabling its transcriptional regulatory functions.