Recombinant RX protein (His tag)

Catalog Number	539281
Synonyms	Retina and anterior neural fold homeobox protein
Species	Human
Expression System	E. coli
Accession	Q9Y2V3
Molecular Weight	Predictes a molecular mass of 9.12 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 9 kDa band.

Product Information

Sequence Region	276-346
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 276-346 aa (Q9Y2V3) 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 Retinal homeobox protein Rx (RAX) fragment (residues 276-346), a highly stable and soluble protein unit designed for advanced structural and biochemical studies. This product enables researchers to explore key aspects of retinal development and photoreceptor-specific gene regulation with enhanced experimental versatility. The full-length Retinal homeobox protein Rx (RAX) is a nuclear transcription factor crucial for eye formation in humans, where it regulates both the initial specification of retinal cells and their subsequent proliferation. It functions by binding to the photoreceptor conserved element-I (PCE-1/Ret 1) in the promoter of the photoreceptor cell-specific arrestin gene, highlighting its essential role in photoreceptor development and visual system biology. As a nucleus-localized protein, RAX directly influences gene expression pathways fundamental to retinal morphogenesis and function.