Recombinant CRBB1 protein (His tag)

Catalog Number	537830
Synonyms	Beta-B1 crystallin
Species	Human
Expression System	E. coli
Accession	P53674
Molecular Weight	Predictes a molecular mass of 24.41 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	58-252
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 58-252 aa (P53674) 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 Beta-crystallin B1 (CRYBB1) Fragment (aa 58-252) is a high-purity protein designed for structural and functional studies. This 195-amino acid fragment fully encompasses all four 'Greek key' domains, making it an ideal tool for investigating the specific roles of these motifs in lens crystallin assembly and stability. Beta-crystallin B1 is a key structural component of the vertebrate eye lens, where crystallins collectively maintain lens transparency and refractive properties. As part of the beta-crystallin family, this protein contributes to the structural integrity of lens fibers through its characteristic 'Greek key' motif domains, which facilitate proper protein folding and supramolecular organization essential for optical clarity.