Recombinant P protein (His tag)

Catalog Number	542553
Synonyms	Melanocyte-specific transporter protein; Pink-eyed dilution protein homolog
Species	Human
Expression System	E. coli
Accession	Q04671
Molecular Weight	Predictes a molecular mass of 16.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	198-330
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 198-330 aa (Q04671) 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 OCA2 (P Protein) Fragment (aa 198-330) – a highly stable and soluble 133-amino acid fragment of the melanocyte-specific transporter protein, ideal for structural and biochemical studies of melanogenesis and pigmentation mechanisms. The full-length OCA2 protein, also known as the P protein or pink-eyed dilution protein homolog, is a multi-pass membrane protein localized to melanosome membranes. It plays a critical role in melanin synthesis by contributing to a melanosome-specific anion current that modulates melanosomal pH for optimal tyrosinase activity, which is essential for melanogenesis and melanosome maturation. As a key component of the mammalian pigmentary system, OCA2 is a major determinant of brown and blue eye color and ethnic skin color variation, and it may regulate the post-translational processing of tyrosinase, the rate-limiting enzyme in melanin production.