Recombinant PACRG protein (His tag)

Catalog Number	548008
Synonyms	Molecular chaperone/chaperonin-binding protein; PARK2 coregulated gene protein
Species	Human
Expression System	E. coli
Accession	Q96M98
Molecular Weight	Predictes a molecular mass of 20.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	36-203
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 36-203 aa (Q96M98) 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 Parkin Coregulated Gene Protein (PACRG) Fragment (aa 36-203) is a high-purity, stable protein fragment designed for structural and biochemical studies. This 168-amino acid fragment retains key solubility and stability properties, making it an ideal tool for investigating PACRG's roles in microtubule organization, ciliary function, and neuroprotection. The full-length Parkin coregulated gene protein (PACRG) is a multifunctional protein involved in microtubule inner protein (MIP) organization within cilia axonemes, essential for motile cilia beating. It also plays a protective role in neuronal health by suppressing cell death induced by unfolded Pael receptor accumulation and facilitating the formation of protein inclusions under proteasome inhibition. These functions highlight its significance in ciliary motility and potential involvement in Parkinson's disease pathology, particularly in Lewy body formation and dopaminergic neuron protection. PACRG localizes to the cytoplasm and cytoskeleton, specifically within cilium and flagellum axonemes, underscoring its structural and regulatory contributions to cellular motility and protein homeostasis.