Recombinant PHB2 protein (His tag)

Catalog Number	543454
Synonyms	B-cell receptor-associated protein BAP37; D-prohibitin; Repressor of estrogen receptor activity
Species	Human
Expression System	E. coli
Accession	Q99623
Molecular Weight	Predictes a molecular mass of 34.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	2-299
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-299 aa (Q99623) 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 Prohibitin-2 (PHB2) Fragment (aa 2-299) is a high-purity protein designed for structural and functional studies. This stable, soluble fragment retains key domains essential for investigating PHB2's roles as a mitochondrial chaperone, transcriptional co-regulator, and cell signaling mediator, providing a reliable tool for life science research. Prohibitin-2 (PHB2) is a multifunctional protein in Homo sapiens with compartment-specific roles: in mitochondria, it forms prohibitin complexes to stabilize respiratory enzymes, maintain mitochondrial integrity, and act as a mitophagy receptor; in the nucleus, it serves as a transcriptional co-regulator, repressing estrogen receptor activity; and at the plasma membrane, it participates in cell migration and B-cell signaling. It localizes to the mitochondrial inner membrane, cytoplasm, nucleus, and cell membrane, and is implicated in mitochondrial morphogenesis, antiviral immunity, and cellular differentiation. The fragment (aa 2-299) encompasses a stable, soluble region ideal for probing these diverse functions in experimental settings.