Recombinant PGRC2 protein (His tag)

Catalog Number	541741
Synonyms	Progesterone membrane-binding protein; Steroid receptor protein DG6
Species	Human
Expression System	E. coli
Accession	O15173
Molecular Weight	Predictes a molecular mass of 19.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	67-223
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 67-223 aa (O15173) 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 PGRMC2 (67-223) Fragment is a high-purity protein designed to encompass the Cytochrome b5 heme-binding domain (residues 102-201). This fragment serves as an essential tool for investigating heme chaperone activity, progesterone signaling, and metabolic regulation in adipocyte and reproductive research. Membrane-associated progesterone receptor component 2 (PGRMC2) is a multifunctional protein in Homo sapiens that acts as a non-classical progesterone receptor and an intracellular heme chaperone. It is critical for maintaining uterine architecture, supporting female reproductive lifespan, and regulating systemic glucose homeostasis and adipocyte function. PGRMC2 facilitates the delivery of labile heme to the nucleus, where it modulates transcriptional repressors like NR1D1 and BACH1, particularly in tissues with high heme demand such as brown fat. The protein localizes to the membrane, nucleus envelope, endoplasmic reticulum, and is also secreted, underscoring its diverse roles in cellular signaling and metabolic processes.