Recombinant RGMC protein (His tag)

Catalog Number	542971
Synonyms	Hemochromatosis type 2 protein; Hemojuvelin BMP coreceptor; RGM domain family member C
Species	Human
Expression System	E. coli
Accession	Q6ZVN8
Molecular Weight	Predictes a molecular mass of 40.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	36-400
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 36-400 aa (Q6ZVN8) 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 Hemojuvelin Fragment (residues 36-400) is a stable and soluble protein unit designed for structural and biochemical studies. This fragment retains key functional regions, enabling research into its role as a BMP coreceptor and its involvement in iron homeostasis regulation. Hemojuvelin, encoded by the HJV gene, functions as a bone morphogenetic protein (BMP) coreceptor that enhances BMP signaling to regulate hepcidin expression and maintain iron homeostasis. The full-length protein is localized to the cell membrane via a GPI-anchor and can also be released into the extracellular space, highlighting its dual role in cell-associated and soluble signaling pathways. This recombinant fragment (residues 36-400) encompasses a computationally predicted stable domain, facilitating investigations into the molecular mechanisms underlying iron metabolism and BMP-mediated signaling.