Recombinant ANPRC protein (His tag)

Catalog Number	546798
Synonyms	Atrial natriuretic peptide clearance receptor; Atrial natriuretic peptide receptor type C; ANP-C; ANPR-C; NPR-C
Species	Human
Expression System	E. coli
Accession	P17342
Molecular Weight	Predictes a molecular mass of 50.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	48-481
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 48-481 aa (P17342) 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 Atrial Natriuretic Peptide Receptor 3 (NPR3) Fragment (residues 48-481) is a high-quality, soluble protein designed for structural and biochemical studies. This 434-amino acid fragment, derived from the extracellular domain, offers a stable and functional unit ideal for investigating natriuretic peptide interactions and receptor dynamics. The full-length Atrial Natriuretic Peptide Receptor 3 (NPR3), encoded by the NPR3 gene in Homo sapiens, serves as a receptor for natriuretic peptide hormones, including ANP, BNP, and CNP, binding them with similar affinities. It functions primarily as a clearance receptor, regulating local concentrations and biological effects of these peptides. Additionally, NPR3 plays a role in osteoblast differentiation and bone growth by interacting with osteocrin, which modulates cGMP production. The protein is localized to the cell membrane as a single-pass type I membrane protein, underscoring its relevance in cellular signaling and homeostasis pathways.