

Human NPR3 Protein; His Tag

Product Information

Product Name	Human NPR3 Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Catalog# / Size	GM-88538RP-100 / 100 μg GM-88538RP-1000 / 1 mg
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Protein Information

Alternative Names	ANP-C, ANPR-C, ANPRC, BOMOS, C5orf23, GUCY2B, NPR-C, NPRC
Source	Human NPR3 Protein; His Tag (GM-88538RP) is expressed from human 293 cells (HEK-293). It contains AA Thr 24 - Glu 481 (Accession # P17342-1). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	51.5 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	NPR3 protein, full name Natriuretic Peptide Receptor 3 (also known as Natriuretic Peptide Clearance Receptor or NPR-C), is an important cell membrane receptor protein and a member of the natriuretic peptide receptor family. NPR3 protein plays a crucial role in regulating cardiovascular homeostasis, fluid balance, and blood pressure by serving as a clearance receptor that binds and internalizes atrial and brain natriuretic peptides (ANP and BNP), thereby modulating their circulating levels and biological half-lives. Dysregulation of NPR3 protein expression or function is closely associated with the pathogenesis of various cardiovascular diseases, including heart failure, hypertension, and atherosclerosis. In disease states, altered NPR3 expression can impair natriuretic peptide clearance, leading to disturbed fluid and electrolyte homeostasis, which exacerbates cardiac remodeling and vascular dysfunction. Additionally, emerging evidence has linked NPR3 to tumor progression, where it may influence the tumor microenvironment and metastatic potential through its involvement in the cGMP-independent signaling pathways. In summary, NPR3 protein plays a pivotal role in cardiovascular physiology and disease pathophysiology. It is of great significance for understanding the mechanisms of fluid regulation, identifying novel therapeutic targets for cardiovascular and metabolic diseases, and evaluating patient prognosis in related clinical settings.

Version:4.0

SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.