

Recombinant Human NT-proBNP Protein, N-6×His and C-mFc tagged

Cat. No. NPPB-04H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human NT-proBNP, derived from the transfected human HEK293 cells with N-terminal 6x histidine tag and C-terminal mouse IgG Fc tag.
Species	Human
Source	HEK293
ProteinLength	His27-Arg102
Description	This gene is a member of the natriuretic peptide family and encodes a secreted protein which functions as a cardiac hormone. The protein undergoes two cleavage events, one within the cell and a second after secretion into the blood. The protein's biological actions include natriuresis, diuresis, vasorelaxation, inhibition of renin and aldosterone secretion, and a key role in cardiovascular homeostasis. A high concentration of this protein in the bloodstream is indicative of heart failure. The presence of myocardial injury is a significant predictor of mortality in hospitalized coronavirus disease 2019 (COVID-19) patients, and there is evidence of increased levels of natriuretic peptide B in hospitalized non-survivor COVID-19 patients. The protein also acts as an antimicrobial peptide with antibacterial and antifungal activity. Mutations in this gene have been associated with postmenopausal osteoporosis.
Form	Lyophilized powder
Molecular Mass	Recombinant human NT-proBNP has a calculated molecular mass of 35 kDa

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(including a C-terminal mouse IgG Fc tag, 27 kDa). Due to the abundant glycosylation, it migrates as approximately 40-50 kDa protein bands in SDS-PAGE under DTT, beta-mercaptoethanol reducing conditions.

Purity

> 90%, SDS-PAGE under reducing conditions and visualized by Coomassie blue staining

Stability

Upon arrival, the protein may be stored for 2 weeks at 4 centigrade. For long term storage, it is recommended to store at -20 or -80 centigrade in appropriate aliquots. Avoid repeated freeze-thaw cycles.

Storage

At -20 centigrade.

Storage Buffer

Lyophilized from a 0.2 µm filtered solution in PBS.

Shipping

Ice packs

Reconstitution

Briefly spin the vial and bring the contents to the bottom prior to opening. It is recommended to reconstitute at 0.5-1.0 mg/mL with sterile deionized water or 1×PBS.

GENE INFORMATION

Gene Name

NPPB natriuretic peptide B [Homo sapiens (human)]

Official Symbol

NPPB

Synonyms

NPPB; natriuretic peptide B; BNP; Iso-ANP; natriuretic peptides B; brain natriuretic factor prohormone; brain type natriuretic peptide; gamma-brain natriuretic peptide; natriuretic peptide precursor B; natriuretic protein; preproBNP; proBNP

Gene ID

4879

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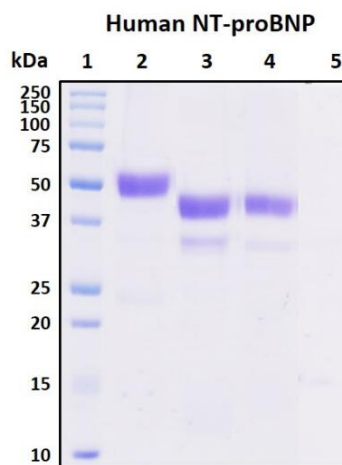
mRNA Refseq [NM_002521](#)

Protein Refseq [NP_002512](#)

MIM [600295](#)

UniProt ID [P16860](#)

SDS-PAGE



Deglycosylation of purified recombinant proteins. Purified proteins were untreated (Lane 2) or treated with protein deglycosylation enzymes under native (Lane 3) or reducing (Lane 4) conditions. Deglycosylation treatment resulted in a mobility shift of the protein to produce one major band at the expected size, thus indicating that the untreated recombinant protein (Lane 2) was glycosylated.

Lane 1: Protein standard ladder (kDa).

Lane 2: Untreated protein under reducing conditions.

Lane 3: Treated protein with deglycosylation enzymes under native conditions.

Lane 4: Treated protein with deglycosylation enzymes under reducing conditions.

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Lane 5: Deglycosylation mixture only without target proteins.

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