OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for EA200023

Human BNP (NPPB) ELISA Kit 1 x 96

Product data:

Product Type:	ELISA Kits
Description:	Human BNP (NPPB) ELISA Kit 1 x 96
Size:	1 x 96 wells
Format:	8x12 divisible strips
Assay Type:	Sandwich
Assay Length:	3hours incubations; 20min washing and analyzing samples
Signal:	Colorimetric
Curve Range:	31pg/ml-2000pg/ml
Sample Type:	Human serum, plasma and other biological fluids
Sample Volume:	100µl
Specificity:	This kit is used for quantitative detection of Human BNP
Sensitivity:	6.99pg/ml
Reactivity:	Human
Cross Reactivity:	There is no detectable cross-reactivity with other relevant proteins or peptides.
Interference:	No significant interference observed with available related molecules.
Components:	• BNP Antibody Coated 96-well Plate in foil pouch with desiccant | 1 plate • Recombinant Human BNP Standard (100ng/ml) | 0.1 mL • 100x Human BNP Detection Antibody-HRP Conjugate | 0.12 mL • Assay Buffer | 15 mL • Standard Diluent | 20 mL • Sample Diluent1 | 20 mL • Sample Diluent2 | 20 mL • Wash Buffer Concentrate 20X | 60 mL • TMB Substrate | 12 mL • Stop Solution | 12 mL

View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Background: Brain natriuretic peptide (BNP) or ventricular natriuretic peptide, also known as B-type natriuretic peptide, is a hormone secreted by cardiomyocytes in the heart ventricles in response to stretching caused by increased ventricular blood volume. BNP is synthesized as a 134-amino acid preprohormone (preproBNP), encoded by the human gene NPPB. Removal of the 25-residue N-terminal signal peptide generates the prohormone, proBNP, which is stored intracellularly as an O-linked glycoprotein; proBNP is subsequently cleaved between arginine-102 and serine-103 by a specific convertase into a biologically inactive 76–amino acid N-terminal fragment (NT-proBNP) and the biologically active 32-amino acid polypeptide BNP, which are secreted into the blood in equimolar amounts. The BNP is secreted attached to the NT-proBNP. Once released, BNP binds to and activates the atrial natriuretic factor receptor NPRA. The biological half-life of BNP, however, is twice as long as that of atrial natriuretic peptide (ANP), and that of NT-proBNP is even longer, making these peptides better targets than ANP for diagnostic blood testing. The physiologic actions of BNP are similar to those of ANP and include decrease in systemic vascular resistance and central venous pressure as well as an increase in natriuresis. The net effect of these peptides is a decrease in blood pressure due to the decrease in systemic vascular resistance and, thus, afterload. Additionally, the actions of both BNP and ANP result in a decrease in cardiac output due to an overall decrease in central venous pressure and preload as a result of the reduction in blood volume that follows natriuresis and diuresis. BNP was found to have an important role in prognostication of heart surgery patients and may be a reliable predictor of cardiovascular mortality in diabetics. BNP has been used as an aid in the diagnosis and assessment of severity of heart failure.

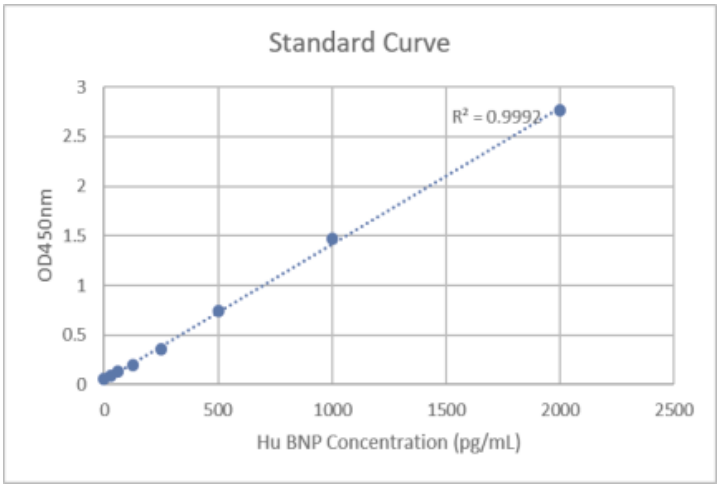
Gene Symbol: NPPB

Gene ID: 4879

Standard Curve:

Data image of BNP (NPPB) ELISA Kit.

Product images:



Data image of BNP (NPPB) ELISA Kit.

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US