# abcam

## Product datasheet

## Human NT-proBNP ELISA Kit ab263877

יעלשעבע SimpleStep ELISA

1 References 画像数7

#### 製品の概要

製品名 Human NT-proBNP ELISA Kit

検出方法 Colorimetric

再現性

サンプル	N	平均値	SD	CV%
Serum	8			4.3%

Inter-Assay(日差再現性)

特定サンプルでの回収試験

Intra-Assay(同時再現性)

サンプル	N	平均值	SD	CV%	
Serum	3			5.6%	

サンプルの種類 Serum, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 11.5 pg/ml

検出範囲 21.9 pg/ml - 1400 pg/ml

添加回収試験

サンプルの種類	平均 %	測定範囲
Serum	90	84% - 94%
Hep Plasma	89	84% - 93%
EDTA Plasma	89	88% - 90%
Cit plasma	90	85% - 94%

全工程の試験時間 1h 30m

ステップ One step assay 種交差性 交差種: Human

#### 非交差種: Cow

#### 製品の概要

Human NT-proBNP ELISA Kit (ab263877) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of NT-proBNP protein in cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human NT-proBNP with 11.5 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

#### 特記事項

NT-proBNP, or Brain Natriuretic Peptide, is a hormone expressed by cardiomyocytes by the gene *NPPB*. NT-proBNP is synthesized as a 134- amino acid preprohormone (prepro-BNP), subsequent removal of a 25 amino acid signal peptide forms pro-BNP, which is stored intracellularly. Pro-BNP is secreted as an inactive prohormone and cleavage by furin or corin forms NT-pro-BNP and the active 32- amino acid BNP-32 peptide. BNP may function as a paracrine antifibrotic factor in the heart, as well as have a key role in cardiovascular homeostasis through natriuresis, diuresis, vasorelaxation, and inhibition of renin and aldosterone secretion. The antibody pair in this product detect NT-pro-BNP.

#### 試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

#### 製品の特性

## 保存方法

## Store at +4°C. Please refer to protocols.

内容	1 x 96 tests	1 x 384 tests	1 x 96 tests
10X Human NT-proBNP Capture Antibody	1 x 600µl	1 x 600µl	1 x 600µl
10X Human NT-proBNP Detector Antibody	1 x 600µl	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml	1 x 20ml
384 well CaptSure™ microplates	0 x 0 unit	1 unit	0 x 0 unit
Antibody Diluent CPI2	1 x 6ml	1 x 6ml	1 x 6ml
Human NT-proBNP Lyophilized Recombinant Protein	2 vials	2 vials	2 vials
Plate Seals	1 unit	1 unit	1 unit

内容	1 x 96 tests	1 x 384 tests	1 x 96 tests
Sample Diluent 50BS	1 x 20ml	1 x 20ml	1 x 20ml
Sample Diluent NS (ab193972)	1 x 12ml	0 x 0ml	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	0 x 0 unit	1 unit
Stop Solution	1 x 12ml	2 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	2 x 12ml	1 x 12ml

機能 Cardiac hormone which may function as a paracrine antifibrotic factor in the heart. Also plays a

key role in cardiovascular homeostasis through natriuresis, diuresis, vasorelaxation, and inhibition of renin and aldosterone secretion. Specifically binds and stimulates the cGMP production of the

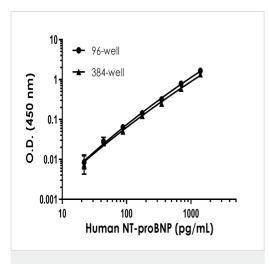
NPR1 receptor. Binds the clearance receptor NPR3.

組織特異性 Brain and also in atria, but at much lower levels than ANP.

**配列類似性** Belongs to the natriuretic peptide family.

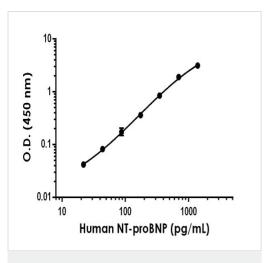
細胞内局在 Secreted.

## 画像



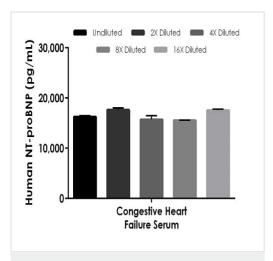
Sandwich ELISA - Human NT-proBNP ELISA Kit (ab263877)

Example of human NT-proBNP standard curve in 96-well vs. 384-well plate. Background-subtracted data values (mean +/- SD) are graphed.



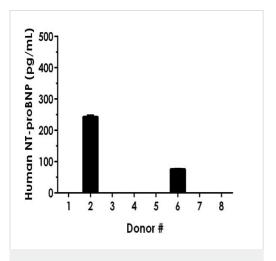
The NT-proBNP standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of human NT-proBNP standard curve in Sample Diluent 50BS.



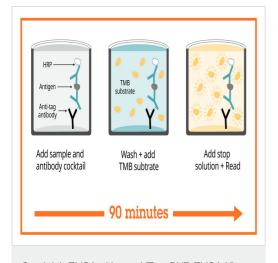
Interpolated concentrations of native NT-proBNP in human congestive heart failure serum samples.

The concentrations of NT-proBNP were measured in duplicates, interpolated from the NT-proBNP standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 7.5%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean NT-proBNP concentration was determined to be 16,839 pg/mL in serum.



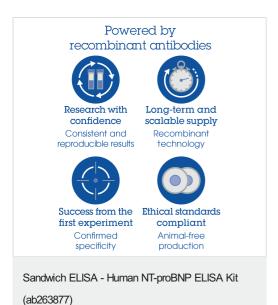
Two were positive for Human BNP. Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean NT-proBNP concentration was determined to be 159.7 pg/mL with a range of 76.1-243.3 pg/mL.

Serum from eight individual healthy human female donors was measured in duplicate.

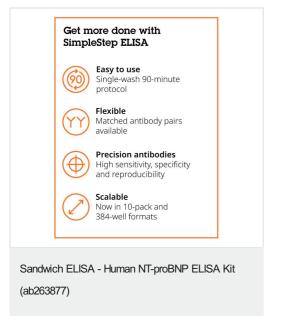


Sandwich ELISA - Human NT-proBNP ELISA Kit (ab263877)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



To learn more about the advantages of recombinant antibodies see **here**.



To learn more about the advantages of SimpleStep  $\mathsf{ELISA}^{@}$  kits see  $\underline{\mathsf{here}}$ .

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