



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet Rabbit anti- proBNP antibody

**Catalog No.**  
130-10043

**Isotype:**  
Rabbit Ig G

**Species:**  
Human

**Accession No:**  
P16860

## Description

Brain natriuretic peptide (BNP) is a polypeptide of 134-amino acids comprised of a 26-amino acid signal peptide (Met1-Ser26), a 76-amino acid N-terminal fragment (NT-proBNP) (His27-Arg102), and a 32-amino acid mature polypeptide of brain natriuretic peptide 32 (BNP-32)(Ser103-His134). BNP-32 is secreted by the ventricles of the heart in response to excessive stretching of heart muscle cells (cardiomyocytes). BNP-32 is cosecreted along with NT-proBNP which is biologically inactive. Both BNP-32 and NT-proBNP markers are used for screening, diagnosis of acute congestive heart failure (CHF). The plasma concentrations of both BNP and NTproBNP are also typically increased in patients with asymptomatic/symptomatic left ventricular dysfunction.

## Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:16000 (at least detecting 62.5 ng/ml)
Western Blotting			*	
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### **Preparation**

Immunogen was human expressed proBNP long peptide(76 Amino acid of N-terminal fragment). This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation, and followed by Protein A/G affinity chromatography.

### **Binding Activity**

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat proBNP was not tested yet.

### **Reconstitution**

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. ***It final concentration is indicated in shipping vial.***

The antibody is stable for at least years from the data of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at  $4^{\circ}\text{C}$ . **Please avoid freeze-thaw cycles.**

### **Storage**

Keep it at  $4^{\circ}\text{C}$  if intended for use within a month. Store at  $-20^{\circ}\text{C}$  if over months. **Minimize freezing and thawing when use.**

### **Related products**

1. Rabbit Anti-Human pro-Brain Natriuretic Peptide, Cat# 130-10015
2. RayBio® Brain Natriuretic Peptide (BNP) EIA Kit, Cat# EIA-BNP-1
3. Recombinant Human pro-Brain Natriuretic Peptide, 230-00009-1

### **Reference**

Dan L.et al., (2008) A glycosylated form of the human cardiac hormone pro B-type natriuretic peptide is an intrinsically unstructured monomeric protein. Arch Biochem Biophys.475(1): 36–41.

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