

## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

## Mouse Anti-Human proBNP Antibody

**Catalog No.**  
130-10070

**Isotype/Clone:**  
Mouse IgG1

**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 co-secreted 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.

### ***Preparation***

Immunogen was recombinant protein derived from proBNP. This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with the immunogen. The IgG fraction of tissue culture supernatant was purified by Protein G/A affinity chromatography.

### ***Applications***

Direct ELISA: antibody detection limit dilution 1:2,000. Recommended for use at 100 ng/ml. Optimal dilutions should be determined by each laboratory for each application.

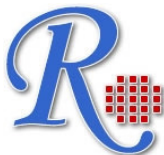
### ***Specificity***

The Mouse anti-human proBNP antibody specifically detects target derived from human recombinant protein at various concentrations. Cross reactivity with mouse and rat are expected from sequence similarity.

### ***Reconstitution***

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

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



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### **Storage**

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 1 month at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

### **Reference**

1. Bhalla V, et al. (2004). B-type natriuretic peptide: the level and the drug--partners in the diagnosis of congestive heart failure. *Congest Heart Fail* **10** (1 Suppl 1): 3–27.
2. Atisha D, et al. (2004). A prospective study in search of an optimal B-natriuretic peptide level to screen patients for cardiac dysfunction. *Am. Heart J.* **148** (3): 518–23.
3. Maisel A, et al. (2002). Rapid measurement of B-type natriuretic peptide in the emergency diagnosis of heart failure. *N Engl J Med* **347** (3): 161–7.

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