



Monoclonal Anti-human BNP precursor Antibody

ORDERING INFORMATION

Catalog Number: MAB36041

Clone: 370124

Lot Number: ZWB01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS
with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human proBNP

Immunogen: *E. coli*-derived rhproBNP

Ig class: rat IgG_{2b}

Recommended Application:
Immunohistochemistry

Other Application:
Direct ELISA

Background

Brain-type Natriuretic Peptide (BNP) is a nonglycosylated peptide that is produced predominantly by ventricular myocytes and belongs to the natriuretic peptide family. Proteolytic cleavage of the 12 kDa BNP precursor gives rise to N-terminal proBNP (NT-proBNP) and mature BNP. Plasma NT-proBNP is a marker for congestive heart failure, while mature BNP (aa 103 - 134) promotes vasodilation and fluid and sodium excretion. Human BNP precursor shares 29% and 51% aa sequence identity with mouse and porcine BNP precursor, respectively.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, *E. coli*-derived, recombinant BNP precursor (rhproBNP; aa 27 - 134; Accession # P16860). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rhproBNP in direct ELISAs. This antibody does not detect BNP-32 (aa 103 - 134).

Applications

Immunohistochemistry - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents to detect proBNP in paraffin-embedded normal human heart tissue sections. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human proBNP. The detection limit for rhproBNP is approximately 20 ng/well.

For immunohistochemistry images, please refer to our website at
<http://www.RnDSystems.com/go/ihc>.

Optimal dilutions should be determined by each laboratory for each application.

フナコシ株式会社

試薬に関して: Tel. 03-5684-1620 / Fax 03-5684-1775
e-mail: reagent@funakoshi.co.jp

2007/11/22

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

R&D Systems, Inc.
1-800-343-7475

11/12/07