

# Product datasheet

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# ARG10146 anti-BNP antibody [50E1]

Package: 100 μg, 50 μg

Store at: -20°C

# **Summary**

Product Description Mouse Monoclonal antibody [50E1] recognizes BNP

Tested Reactivity Hu

Tested Application ELISA, WB

Specificity Human BNP and proBNP

Host Mouse

**Clonality** Monoclonal

Clone 50E1

Isotype IgG1

Target Name BNP

Species Human

Immunogen Human synthetic BNP (whole molecule)

Epitope CKVLRRH (a.a. 26-32 of human BNP)

Conjugation Un-conjugated

Alternate Names 4-27; Natriuretic peptides B; 1-28; 1-29; 5-32; BNP; 1-32; 1-30; BNP-32; 5-29; 2-31; 4-30; 4-31; 4-32;

3-29; Gamma-brain natriuretic peptide; 3-30; 5-31; 3-32; 4-29

# **Application Instructions**

Application table	Application	Dilution
	ELISA	Assay-dependent
	WB	Assay-dependent
Application Note	sELISA: Recommended antibody pairs in sandwich immunoassay for BNP (capture - detection):  ARG10146 - ARG10609  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

# **Properties**

Form Liquid

Purification Protein A affinity purified.

Buffer PBS (pH 7.4) and 0.1% Sodium azide

Preservative 0.1% Sodium azide

Concentration 1.0-2.0 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

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freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 4879 Human</u>

Swiss-port # P16860 Human

Gene Symbol NPPB

Gene Full Name natriuretic peptide B

Background This gene is a member of the natriuretic peptide family and encodes a secreted protein which functions

as a cardiac hormone. The protein undergoes two cleavage events, one within the cell and a second after secretion into the blood. The protein's biological actions include natriuresis, diuresis, vasorelaxation, inhibition of renin and aldosterone secretion, and a key role in cardiovascular homeostasis. A high concentration of this protein in the bloodstream is indicative of heart failure. The protein also acts as an antimicrobial peptide with antibacterial and antifungal activity. Mutations in this

gene have been associated with postmenopausal osteoporosis. [provided by RefSeq, Nov 2014]

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. [UniProt]

Highlight Related Antibody Duos and Panels:

ARG30278 BNP ELISA Antibody Duo

Related products:

BNP antibodies; BNP ELISA Kits; BNP Duos / Panels; Anti-Mouse IgG secondary antibodies;

Research Area Cell Biology and Cellular Response antibody; Signaling Transduction antibody

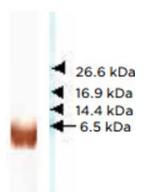
Calculated Mw 15 kDa

PTM The brain natriuretic peptide 32 form is cleaved at Pro-104 by the prolyl endopeptidase FAP (seprase)

activity (in vitro).

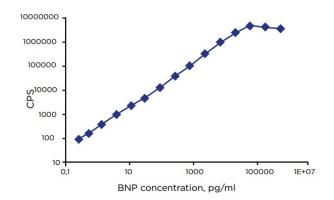
# **Images**

Function



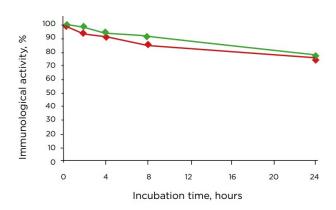
#### ARG10146 anti-BNP antibody [50E1] WB image

Western blot: Human synthetic BNP stained with ARG10146 anti-BNP antibody [50E1].



## ARG10146 anti-BNP antibody [50E1] FLISA image

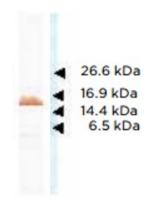
FLISA: Biotinylated ARG10146 anti-BNP antibody [50E1] used as capture antibody and Eu3+ - labeled ARG10609 anti-BNP antibody [24C5] used as detection antibody. Mixture of antibodies (50  $\mu$ l) and synthetic BNP (50  $\mu$ l) is incubated for 30 min at RT in streptavidincoated plate.



#### ARG10146 anti-BNP antibody [50E1] stability studies image

Stability studies: Recombinant glycosylated proBNP (from mammalian cell line) (green) and endogenous proBNP, purified from pooled HF patients plasma (red) were reconstituted in pooled normal human EDTA-plasma and incubated at RT for different time periods.

Immunological activity was measured by immunoassay, utilizing \_ <u>ARG10146</u> anti-BNP antibody [50E1] as capture and <u>ARG10609</u> anti-BNP antibody [24C5] as detection.



## ARG10146 anti-BNP antibody [50E1] WB image

Western blot: Recombinant proBNP (E. coli expressed) stained with ARG10146 anti-BNP antibody [50E1].