

# Datasheet: MCA2642

**BATCH NUMBER 170525**

<b>Description:</b>	MOUSE ANTI HUMAN BRAIN NATRIURETIC PEPTIDE
<b>Specificity:</b>	BRAIN NATRIURETIC PEPTIDE
<b>Other names:</b>	BNP
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	50E1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			
Immunoassay	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Human synthetic Brain natriuretic hormone.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P16860</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4879</a>    NPPB    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2155429
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Brain Natriuretic Peptide antibody, clone 50E1</b> detects an epitope located at the C-terminal (amino acids 26-32) of the human brain natriuretic peptide (BNP), a secreted protein which is a member of the natriuretic peptide family. BNP is a cardiac hormone, which is synthesised as a pro-hormone (proBNP), and is proteolytically cleaved to release a biologically active fragment (BNP), and an inactive fragment (NT-proBNP) into the circulation.</p> <p>BNP is predominantly secreted from the cardiac ventricles in response to volume and pressure overload, and results in a number of biological activities including natriuresis, diuresis, vasorelaxation, and inhibition of the sympathetic nervous system. A high concentration of BNP in the bloodstream is indicative of heart failure.</p> <p>Mouse anti Human Brain Natriuretic Peptide antibody, clone 50E1 also detects proBNP.</p>
<b>Western Blotting</b>	MCA2642 detects a band of approximately 4kDa when using synthetic BNP and a band of 15kDa when using recombinant proBNP.
<b>References</b>	<ol style="list-style-type: none"> <li>Seferian, K.R. <i>et al.</i> (2007) The brain natriuretic peptide (BNP) precursor is the major immunoreactive form of BNP in patients with heart failure. <a href="#">Clin Chem. 53 (5): 866-73.</a></li> <li>Tamm, N.N. <i>et al.</i> (2008) Novel immunoassay for quantification of brain natriuretic peptide and its precursor in human blood. <a href="#">Clin Chem. 54 (9): 1511-8.</a></li> </ol>
<b>Further Reading</b>	<ol style="list-style-type: none"> <li>Clerico, A. <i>et al.</i> (2006) Clinical relevance of biological variation: the lesson of brain natriuretic peptide (BNP) and NT-proBNP assay. <a href="#">Clin Chem Lab Med. 44 (4): 366-78.</a></li> <li>Pfister, R. &amp; Schneider, C.A. (2004) Natriuretic peptides BNP and NT-pro-BNP: established laboratory markers in clinical practice or just perspectives? <a href="#">Clin Chim Acta. 349 (1-2): 25-38.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may</p>

denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2642">https://www.bio-rad-antibodies.com/SDS/MCA2642</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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