

Dedication to heart health?

We
I.V.DO
that TM

Cardiovascular
catalog

Medix Biochemica

Introduction

Cardiovascular diseases (CVD) are a group of disorders affecting the heart and blood vessels. Accounting for an estimated one third of all deaths worldwide, CVDs are the number one global cause of mortality. Rapid diagnostics as well as reliable identification and monitoring of high-risk individuals is vital for lowering risk of CVD-related death and disability. Cardiac biomarkers are a varied group of molecules whose increased concentrations relate to the presence and the risk of future cardiovascular events. There is a growing need for accurate biomarkers for diagnostics and risk stratification, as efficient treatment and prevention of CVD rely on early detection of patients with, or at risk of, these diseases.

Several cardiac markers are currently used in clinical practice to support diagnosis, risk assessment, and treatment follow-up related to different CVD pathophysiological processes. For example, cardiac muscle damage causes cardiac troponin (cTn) to be released into the bloodstream by

myocardial cells. Elevated serum levels of cTn thus indicate heart injury, and immunoassays for cTn form the cornerstone of diagnosing acute myocardial infarction (AMI). Current cTn assay methods allow AMI to be ruled out as early as one hour after onset of symptoms. D-dimer concentrations correlate with the thrombolytic activity and thus provide a useful tool for excluding pulmonary embolism and deep vein thrombosis. Low-density and high-density lipoproteins are also routinely tested to assess risk for developing CVD.

Medix Biochemica provides a wide selection of premium-quality monoclonal antibodies, native antigens and lipoprotein concentrates for cardiac marker detection. Our optimized, industrial-scale production methods, certified batch-to-batch consistency, and expert customer service have made Medix Biochemica one of the most important raw material suppliers for the in vitro diagnostic (IVD) community.



Products

Apolipoprotein A1 (ApoA1)	4, 9	Myeloperoxidase (MPO)	7, 12
Apolipoprotein A2 (ApoA2)	9	Myoglobin	7, 12
Apolipoprotein B (ApoB)	4, 9	N-terminal Prohormone of Natriuretic Peptide (NT-proBNP)	7, 12
Apolipoprotein C1 (ApoC1)	9	Prohormone of Natriuretic Peptide (proBNP)	7
Apolipoprotein C2 (ApoC2)	9	Neutrophil Gelatinase-associated Lipocalin (NGAL)	8, 13
Apolipoprotein C3 (ApoC3)	9	NT-proBNP	13
Apolipoprotein E (ApoE)	9	Renin	8
Brain Natriuretic Peptide (BNP)	10	ST2	8
C-Reactive Protein (CRP)	4, 10	Troponin C (TnC)	12
Cardiac Troponin T (cTnT)	5	Troponin Complex (Tn Complex)	12
Cholesterol (TC)	10	Troponin I	4, 13
Copeptin	5	Troponin T (TnT)	13
Creatine Kinase (CK-MB)	5, 10	Very Low Density Lipoprotein (VLDL)	13
Creatine Kinase BB (CK-BB)	10		
Creatine Kinase MM (CK-MM)	10		
D-dimer	5, 11		
Fatty Acid Binding Protein (FABP)	11		
Fatty-acid-binding Protein 3 (FABP3)	6		
Galectin-3	6, 11		
GDF-15	6		
High Density Lipoprotein (HDL)	11		
Lipoprotein-associated Phospholipase (Lp-PLA2)	6, 11		
Lipoprotein(a) Lp(a)	11		
Low Density Lipoprotein (LDL)	12		

Product	Concentration mg/mL *	Catalog number
---------	-----------------------	----------------

Apolipoprotein A1 (ApoA1)

is a major component of the high-density lipoprotein (HDL). ApoA1 helps clear cholesterol from arteries. ApoA1 has been suggested as a better indicator of coronary artery disease than HDL.

MONOCLONAL ANTIBODIES		
ApoA1	2001	5 100263
	2002	5 100264
RECOMBINANT ANTIGEN		
ApoA1	50 µg	710012
	500 µg	710033
	1000 µg	710032

Apolipoprotein B (ApoB)

is the primary apolipoprotein of low-density lipoprotein (LDL), which is responsible for carrying cholesterol to tissues. High levels of ApoB can lead to plaques that cause atherosclerosis.

MONOCLONAL ANTIBODIES		
ApoB	2101	5 100261

C-Reactive Protein (CRP)

is a protein found in the blood, whose rise in response to inflammation. CRP values are useful in determining disease progress or the effectiveness of treatments.

MONOCLONAL ANTIBODIES		
CRP	6402	5 100145
	6403	5 100146
	6404	2 100058
	6405	6 100061
	6406	5 100358
	6407	5 100147

Cardiac Troponin I (cTnI)

Troponins form a complex of three regulatory proteins (troponin I, T, and C) that are integral to muscle contraction in skeletal and cardiac muscles. Serum cardiac troponin tests can be used to help diagnose several different heart disorders, especially myocardial infarction.

MONOCLONAL ANTIBODIES		
cTnI	9701	5 100129
	RC9701	5 140000
	9703	5 100181
	9705	1 100125
	9707	5 100180
	RC9707	5 140020
	RC9750	5 700050
RECOMBINANT ANTIGEN		
cTnI antigen	100 µg	610102

Product	Concentration mg/mL *	Catalog number
---------	-----------------------	----------------

Cardiac Troponin T (cTnT)

Troponins form a complex (troponin I, T, and C) and are involved in muscle contraction. Troponin levels can be used as a test for several different heart disorders, including myocardial infarction.

MONOCLONAL ANTIBODIES		
cTnT	3701	5 100660
	3703	5 100700
	3708	5 100704
	3710	5 100698
	3711	5 100701
	3712	5 100699
RECOMBINANT ANTIGEN		
cTnT antigen	100 µg	610101

Copeptin

is a 39-amino acid glycopeptide, cleaved from the C-terminus of pre-provasopressin (pre-proAVP). It has been suggested as a biomarker in diagnosis and prognosis of several diseases, such as acute myocardial infarction, heart failure, hyponatremia, and sepsis.

MONOCLONAL ANTIBODIES		
Copeptin	4801	5 100638
	4802	5 100639
	4804	5 100649
	4806	5 100648

Creatine Kinase (CK-MB)

is a dimeric enzyme consisting of B (brain) and M (muscle) type subunits. CK-MB is used for diagnosis of myocardial infarction.

MONOCLONAL ANTIBODIES		
CK-MB	7501	5 100630
	7502	5 100086

D-dimer

is a small degradation product of cross-linked fibrin. D-dimer is released in the blood during fibrinolysis and it is used to diagnose pulmonary embolism and deep vein thrombosis.

MONOCLONAL ANTIBODIES		
D-dimer	1401	5 100204
	1402	5 100205
	1403	5 100228
	1404	5 100479
	1405	5 100480
	1407	5 100482
	1408	5 100799
	1409	5 100800

Product	Concentration mg/mL *	Catalog number
---------	--------------------------	-------------------

Fatty-acid-binding Protein 3 (FABP3)

is a member of the FABP family of carrier proteins for fatty acids and other lipophilic substances. Heart-type FABP (FABP3) can be used as a diagnostic marker in the early phase of acute myocardial infarction.

MONOCLONAL ANTIBODIES			
FABP3	2302	5	100292
	2303	5	100293
	2304	5	100294
RECOMBINANT ANTIGEN			
FABP3 antigen	100 µg		610043

Galectin-3

is a beta-galactosidase-binding lectin. The expression of galectin-3 is upregulated during inflammation. It is used in assessing the prognosis of patients diagnosed with chronic heart failure. Galectin-3 is also involved in pathological processes including cancer, fibrosis and chronic inflammation.

MONOCLONAL ANTIBODIES			
Galectin-3	10301	5	100730
	10302	5	100731
	10303	5	100732
	10304	5	100733
	10305	5	100734
RECOMBINANT ANTIGEN			
Galectin-3 antigen	100 µg		610144

GDF-15

Growth differentiation factor 15 (GDF-15) is a stress responsive cytokine having elevated expression levels during tissue injury and inflammatory states. Increased GDF-15 levels are associated with cardiovascular diseases such as heart failure and atherosclerosis, and also with chronic kidney disease and cancer.

MONOCLONAL ANTIBODY			
GDF-15	4901	5	100688
	4902	5	100658
	4903	5	100836
	4904	5	100837
	4905	5	100838

Lipoprotein-associated Phospholipase A2 (Lp-PLA2)

also known as platelet-activating factor acetylhydrolase (PAF-AH), is a secreted enzyme produced by inflammatory cells in blood vessels. Lp-PLA2 can be used as a risk marker for cardiovascular diseases.

MONOCLONAL ANTIBODIES			
Lp-PLA2	11202	5	100751
	11205	5	100818
	11207	5	100753
	11209	5	100755

Product	Concentration mg/mL *	Catalog number
---------	--------------------------	-------------------

Myeloperoxidase (MPO)

is an enzymatic mediator of inflammatory cascades and antimicrobial activity. Higher serum levels of MPO have been associated with cardiovascular diseases.

MONOCLONAL ANTIBODIES			
MPO	1701	5	100266
	1702	5	100267
	1703	5	100268

Myoglobin

is an intracellular protein that transports oxygen in cardiac and skeletal muscle cells. Myoglobin is one of the earliest biomarkers of cardiac injury.

MONOCLONAL ANTIBODIES			
Myoglobin	7001	5	100378
	7004	5	100354
	7005	5	100078
RECOMBINANT ANTIGEN			
Myoglobin antigen	100 µg		610030

N-terminal Prohormone and Prohormone of Natriuretic Peptide (NT-proBNP & proBNP)

The plasma concentrations of both the N-terminal fragment of pro-B-type natriuretic peptide (NT-proBNP) and prohormone of brain natriuretic peptide (proBNP) are significantly increased in patients with asymptomatic and symptomatic left ventricular dysfunction.

MONOCLONAL ANTIBODIES			
NT-proBNP	1306	5	100521
	RC1306	5	140010
	1307	5	100719
	RC1307	5	140011
	1308	5	100712
	1309	5	100710
	1310	5	100718
	1311	5	100716
	1312	5	100717
proBNP	11904	5	100970 NEW
	11906	5	100971 NEW
	11907	5	100972 NEW
	11908	5	100973 NEW

RECOMBINANT ANTIGENS			
NT-proBNP antigen	100 µg		610090
proBNP antigen	50 µg		710017
	500 µg		710043
	1000 µg		710042

Product	Concentration mg/mL *	Catalog number
---------	-----------------------	----------------

Renin

is a proteolytic enzyme secreted by the kidneys that is involved in the release of angiotensin and regulation of sodium and potassium balance. Renin is measured to diagnose primary aldosteronism and hypertension.

MONOCLONAL ANTIBODIES

Product	Concentration mg/mL *	Catalog number
Renin	10850 >1	700025
	10851 >1	700026
	10852 >1	700030

ST2

is a member of interleukin-1 receptor family. The ST2 has two isoforms: a soluble (sST2) and membrane-bound form. Patients with heart failure and elevated sST2 protein levels in the blood are at risk for heart failure progression.

MONOCLONAL ANTIBODIES

Product	Concentration mg/mL *	Catalog number
ST2	10201 5	100680
	10202 5	100681
	10203 5	100682
	10204 5	100683
	10205 5	100684
	10206 5	100685
	10207 5	100686

RECOMBINANT ANTIGENS

Product	Concentration mg/mL *	Catalog number
ST2 antigen	50 µg	710020
	500 µg	710047
	1000 µg	710046

Neutrophil Gelatinase-associated Lipocalin (NGAL)

Neutrophil gelatinase-associated lipocalin (NGAL) also known as lipocalin-2, is used as a biomarker of kidney injury, and has also been shown to play a role in cancer and cardiovascular events.

NGAL MONOCLONAL ANTIBODIES

Product	Concentration mg/mL *	Catalog number
	4202 5	100579
	4203 5	100580
	4204 5	100581
	4205 5	100582

RECOMBINANT ANTIGENS

Product	Concentration mg/mL *	Catalog number
NGAL antigen	100 µg	610012

Product	Source	Purity	Form	Catalog number
---------	--------	--------	------	----------------

Apolipoprotein A1 (ApoA1)

NATIVE ANTIGENS

Product	Source	Purity	Form	Catalog number
ApoA1	Human Plasma	High Purity	Liquid	125-16
			Liquid	125-12
	Human Serum	High Purity	Liquid	124-10

Apolipoprotein A2 (ApoA2)

NATIVE ANTIGEN

Product	Source	Purity	Form	Catalog number
ApoA2	Human Plasma	High Purity	Liquid	125-17

Apolipoprotein B (ApoB)

NATIVE ANTIGENS

Product	Source	Purity	Form	Catalog number
ApoB	Human Plasma	High Purity	Liquid	125-18
		Purified	Liquid	125-25

POLYCLONAL ANTIBODY

Product	Source	Purity	Form	Catalog number
ApoB	Goat anti-Human	High Purity	Liquid	125-26

Apolipoprotein C1 (ApoC1)

NATIVE ANTIGEN

Product	Source	Purity	Form	Catalog number
ApoC1	Human Plasma	High Purity	Liquid	125-19

Apolipoprotein C2 (ApoC2)

NATIVE ANTIGEN

Product	Source	Purity	Form	Catalog number
ApoC2	Human Plasma	High Purity	Liquid	125-20

Apolipoprotein C3 (ApoC3)

NATIVE ANTIGEN

Product	Source	Purity	Form	Catalog number
ApoC3	Human Plasma	High Purity	Liquid	125-21

Apolipoprotein E (ApoE)

NATIVE ANTIGEN

Product	Source	Purity	Form	Catalog number
ApoE	Human Plasma	High Purity	Liquid	125-30
				125-29

Product	Source	Purity	Form	Catalog number
---------	--------	--------	------	----------------

Brain Natriuretic Peptide (BNP)

ANTIGEN

BNP-32	Synthetic	High Purity	Lyophilized	129-10
--------	-----------	-------------	-------------	--------

C-Reactive Protein (CRP)

NATIVE ANTIGENS

CRP	Human Pleural Fluid	High Purity	Liquid	140-11
-----	---------------------	-------------	--------	--------

RECOMBINANT ANTIGEN

CRP	Recombinant	High Purity	Liquid	140-11R
-----	-------------	-------------	--------	---------

POLYCLONAL ANTIBODY

anti-CRP	Goat anti-Human	High Purity	Liquid	GCRP-80A
----------	-----------------	-------------	--------	----------

Cholesterol (TC)

CONCENTRATES

TC	Bovine Serum	Purified	Liquid	185-10
		Purified	Liquid	185-13
		Purified	Liquid	185-20
	Human Plasma	Purified	Liquid	360-35

Creatine Kinase MB (CK-MB)

NATIVE ANTIGEN

CK-MB	Human Heart	High Purity	Liquid	190-24A
-------	-------------	-------------	--------	---------

ENZYMES

CK-MB	Human Heart	Purified	Liquid	190-24
		Purified	Lyophilized	190-25

Creatine Kinase MM (CK-MM)

ENZYMES

CK-MM	Human Skeletal Muscle	High Purity	Liquid	190-29
			Lyophilized	190-28
	Human Heart	Purified	Lyophilized	190-26

Creatine Kinase BB (CK-BB)

ENZYMES

CK-BB	Porcine Brain	Purified	Lyophilized	191-24
-------	---------------	----------	-------------	--------

Product	Source	Purity	Form	Catalog number
---------	--------	--------	------	----------------

D-dimer

NATIVE ANTIGENS

D-dimer	Human Plasma	High Purity	Liquid	200-13
		Purified	Liquid	200-12
		Purified	Liquid	200-09

Fatty Acid Binding Protein (FABP)

NATIVE ANTIGENS

FABP	Human Heart	High Purity	Liquid	276-10
			Lyophilized	276-12

Galectin-3

RECOMBINANT ANTIGEN

Galectin-3	Recombinant	High Purity	Liquid	280-15
------------	-------------	-------------	--------	--------

High Density Lipoprotein (HDL)

CONCENTRATES

HDL-C	Human Plasma	Purified	Liquid	361-10
				361-12
	Bovine Serum	Purified	Liquid	185-10 185-13

Lipoprotein(a) Lp(a)

NATIVE ANTIGEN

Lp(a)	Human Plasma	High Purity	Liquid	400-42
-------	--------------	-------------	--------	--------

POLYCLONAL ANTIBODY

anti-Lp(a)	Sheep anti-Human	High Purity	Liquid	400-45
------------	------------------	-------------	--------	--------

Lipoprotein-associated Phospholipase (Lp-PLA2)

RECOMBINANT ANTIGEN

Lp-PLA2	Recombinant	High Purity	Liquid	400-60
---------	-------------	-------------	--------	--------

Product	Source	Purity	Form	Catalog number
---------	--------	--------	------	----------------

Low Density Lipoprotein (LDL)

CONCENTRATES

LDL-C	Human Plasma	Purified	Liquid	360-10
	Human Plasma	Purified	Liquid	360-12
	Bovine Serum	Purified	Liquid	185-20
	Human Plasma	Highly Purified	Liquid	360-30
Oxidized LDL-C	Human Plasma	Highly Purified	Liquid	360-31

Myeloperoxidase (MPO)

NATIVE ANTIGENS

MPO	Human Neutrophil	High Purity	Liquid	426-10
			Lyophilized	426-10LV

Myoglobin

NATIVE ANTIGEN

Myoglobin	Human Heart	High Purity	Liquid	431-11
-----------	-------------	-------------	--------	--------

POLYCLONAL ANTIBODY

Myoglobin	Goat anti-Human	High Purity	Liquid	GMY-80A
-----------	-----------------	-------------	--------	---------

NT-Pro Brain Natriuretic Peptide (NT-proBNP)

RECOMBINANT ANTIGEN

NT-proBNP	Recombinant	High Purity	Lyophilized	129-17
-----------	-------------	-------------	-------------	--------

Troponin C (TnC)

NATIVE ANTIGEN

Tn-C	Human Heart	High Purity	Liquid	550-40
------	-------------	-------------	--------	--------

Troponin Complex (Tn Complex)

NATIVE ANTIGEN

Tn-Complex	Human Heart	Purified	Liquid	550-08
	Human Heart	Purified	Liquid	550-10

Product	Source	Purity	Form	Catalog number
---------	--------	--------	------	----------------

Troponin I (TnI)

NATIVE ANTIGENS

Tn-I	Human Heart	High Purity	Liquid	550-11
	Human Skeletal Muscle	High Purity	Liquid	550-13

Troponin T (TnT)

NATIVE ANTIGEN

Tn-T	Human Heart	High Purity	Liquid	550-21
------	-------------	-------------	--------	--------

Very Low Density Lipoprotein (VLDL)

CONCENTRATE

VLDL	Human Plasma	Purified	Liquid	365-10
------	--------------	----------	--------	--------

Product	Source	Applications	Matched pairs	Catalog number
---------	--------	--------------	---------------	----------------

NT-proBNP

MONOCLONAL ANTIBODY

NT-proBNP (27-31) Antibody	Mouse	Lateral Flow, CLIA	HM145, HM146 or HM899 (capture)	HM148
NT-proBNP (38-44) Antibody	Mouse	Lateral Flow, CLIA	HM147 or HM148 (detection)	HM146
NT-proBNP (38-44) Antibody	<i>in vitro</i> culture	Lateral Flow, CLIA	HM147 or HM148 (detection)	HM1196

ANTIGEN

NT-proBNP Antigen >98%	E. coli	Control	HM071	LA313
------------------------	---------	---------	-------	-------

Neutrophil Gelatinase-associated Lipocalin (NGAL)

ANTIGEN

NGAL Ag >98%	E. coli	Control, Immunogen		LA312
--------------	---------	--------------------	--	-------

Medix Biochemica Group

Medix Biochemica is a global, market-leading supplier of critical raw materials to the *in vitro* diagnostics (IVD) industry. Our mission is to enable IVD customers to deliver accurate results to billions of patients worldwide. By working in partnership with Medix Biochemica, IVD manufacturers can reduce their time to market through our industry-leading expertise which increases efficiencies and builds quality into their tests. We achieve this through our deep scientific know-how combined with the broadest and most relevant raw material portfolio and our relentless focus on quality.

Medix Biochemica Group employs more than 260 professionals worldwide. With headquarters in Finland, we serve our worldwide customers through our local teams in the US, Europe, and Asia. www.medixbiochemica.com

Close to our global customers

We serve our global customers from our sites in Finland, the USA, France, Germany and China.



The first-choice partner

- Focusing on IVD manufacturers' needs
- Capability to support customers across the globe
- Focus on new product development based on customer needs
- Efficient and scalable manufacturing capabilities



Widest portfolio

- Monoclonal antibodies
- Antigens for immunoassay materials
- Molecular diagnostics reagents
- Enzymes for clinical chemistry controls
- Biochemicals and biologicals



Highest quality

- ISO 13485 & FDA QSR compliance
- Batch to batch consistency
- Scalable production capability from milligrams to kilograms

Our values



We care

We put the customer first; we care for the people and the world around us.



We dare

We are ambitious and innovative; we take risks and dare to win with our customers.



We deliver

We commit to our customers and keep our promises.

Get in touch

Orders:

orders@medixbiochemica.com

Sales inquiries:

sales@medixbiochemica.com

Molecular Diagnostics:

MDx@medixbiochemica.com

Technical support:

techsupport@medixbiochemica.com

General inquiries:

medix@medixbiochemica.com

Medix Biochemica

Ordering and product information

medixbiochemica.com

Copyright © 07/2022 Medix Biochemica. All rights reserved.

Lee Biosolutions, EastCoast Bio, Diaclone, myPOLS Biotech, and Bioresource Technology are part of Medix Biochemica Group. Medix Biochemica reserves the right to make changes and improvements to any of the products described in this document without prior notice.