Dedication to heart health?

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 highrisk 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.



- Alpha-2-Antiplasmin (A2AP)
- Angiotensin-Converting Enzyme 2 (ACE2)
- Angiotensinogen
- Antithrombin III (ATIII/AT3)
- Apolipoprotein A1 (ApoA1)
- Apolipoprotein A2 (ApoA2)
- Apolipoprotein B (ApoB)
- Apolipoprotein C1 (ApoC1)
- Apolipoprotein C2 (ApoC2)
- Apolipoprotein C3 (ApoC3)
- Apolipoprotein E (ApoE)
- Apolipoprotein Lp(a) [ApoLp(a)]
- Brain Natriuretic Peptide (BNP)
- Cholesterol
- Chylomicrons (ULDL)
- 7 Copeptin
- C-Reactive Protein (CRP)
- 8 Creatine Kinase (CK)
- 9 Cystatin C
- 10 D-Dimer (DD)
- 10 Digoxin
- 11 Fatty Acid Binding Protein (FABP3)
- 11 Galectin-3

- 12 Growth Differentiation Factor 15 (GDF-15)
- 12 HDL Cholesterol
- 12 LDL Cholesterol
- 13 Lipoprotein(a) [Lp(a)]
- 13 Lipoprotein-Associated Phospholipase A2 (Lp-PLA2)
- 13 Myeloperoxidase (MPO)
- **14** Myoglobin
- 14 Neutrophil Gelatinase-Associated Lipocalin (NGAL)
- 15 NT-proBNP
- 15 Plasmin
- 16 Plasminogen
- 16 Prothrombin
- 16 Renin
- 16 ST2
- 17 Thrombin
- **17** Triglycerides
- 17 Troponin Complex
- 18 Troponin I (Tnl)
- 19 Troponin T (TnT)
- 19 Very Low Density Lipoprotein (VLDL)
- 20 Biospecimens

Medix Biochemica has defined a set of recommended products to help you choose from our wide offering. These recommedations are based on performance, popularity and availability in bulk volumes.

Recommended products highlighted in bold





### Medix Biochemica

### Alpha-2-Antiplasmin (A2AP)

Alpha 2-antiplasmin is a serine protease inhibitor responsible for inactivating plasmin. Plasmin is an important enzyme that participates in fibrinolysis and degradation of various other proteins.

Product Type		Catalog #	Description	Source/Method
Native antigen	٠٠٠٠	107-50	A2AP, purity ≥ 95%, lyophilized	Human plasma

# **Angiotensin-Converting Enzyme 2 (ACE2)**

Angiotensin-converting enzyme 2 (ACE2) plays a crucial role in the renin-angiotensin system, regulating blood pressure and cardiovascular function. It is also the primary receptor for the SARS-CoV-2 virus, facilitating viral entry into host cells.

Product Type		Catalog #	Description	Source/Method
December out out out	÷į.	LA649	ACE2, purity > 90%	CHO cells
Recombinant antigen	gen	LA650	ACE2, purity > 90%	CHO cells

### Angiotensinogen

Angiotensin is a peptide hormone that causes vasoconstriction and an increase in blood pressure. It is part of the renin—angiotensin system, which regulates blood pressure.

Produ	uct Type		Catalog #	Description	Source/Method
Nativ	ve antigen	٠ٷ٠	123-03	Angiotensinogen, purity >95 %, lyophilized	Human plasma

### **Antithrombin III (ATIII/AT3)**

Antithrombin is also termed antithrombin III (AT III). Antithrombin is a small glycoprotein that inactivates several enzymes of the coagulation system.

Product Type		Catalog #	Description	Source/Method
Native antigen	٠٠٠٠	123-10	Antithrombin III (ATIII/AT3), purity ≥ 95%, lyophilized	Human plasma

# **Apolipoprotein A1 (ApoA1)**

Apolipoprotein A1 (ApoA1) is a major component of high-density lipoprotein (HDL) and helps clear cholesterol from arteries.

Product Type		Catalog #	Description	Source/Method
Managlanal antibody	~	100263	Anti-h ApoA1 2001	In vitro
Monoclonal antibody	U	100264	Anti-h ApoA1 2002	In vitro
Polyclonal antibody	Y	JP067	ApoA1 antibody	In vivo
		124-10	ApoA1, purity ≥ 96%	Human serum
Native antigen	÷Ş.	125-16	ApoA1, purity ≥ 99%	Human plasma
		LA161	ApoA1, purity ≥ 95%	Human plasma

# **Apolipoprotein A2 (ApoA2)**

Apolipoprotein A2 (ApoA2) protein is found in plasma as a monomer, homodimer, or heterodimer with apolipoprotein D. ApoA2 regulates many steps in HDL metabolism.

Product Type		Catalog #	Description	Source/Method
N .: .:	٠٠٥٠	125-17	ApoA2, purity ≥ 99%	Human plasma
Native antigen	£.	LA162	ApoA2, purity ≥ 95%	Human plasma

### Apolipoprotein B (ApoB)

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.

Product Type		Catalog #	Description	Source/Method
Monoclonal antibody	Y	100261	Anti-h ApoB 2101	In vitro
Polyclonal antibody	Y	JP068	ApoB antibody	In vivo
		125-18	ApoB-100, purity ≥ 98%	Human plasma
Native antigen	4-12-4	125-25	ApoB, purity ≥ 80%	Human plasma
		LA191	ApoB, purity ≥ 95%, lyophilized	Human plasma

### **Apolipoprotein C1 (ApoC1)**

Apolipoprotein C1 (ApoC1) is a member of the apolipoprotein family that acts not only to transport lipids and stabilize the lipoprotein structure but also to regulate pathological processes including diabetes, Alzheimer's and inflammation.

Product Type		Catalog #	Description	Source/Method
Ni aki wa anki man	٠٠٠٠٠	125-19	ApoC1, purity ≥ 98%	Human plasma
Native antigen		LA246	ApoC2, purity > 95%, lyophilized	Human plasma

### **Apolipoprotein C2 (ApoC2)**

Apolipoprotein C2 (ApoC2) is a small exchangeable apolipoprotein found on triglyceride-rich lipoproteins (TRL) such as chylomicrons (CM) and very low-density lipoproteins (VLDL), as well as on high-density lipoproteins (HDL).

Product Type		Catalog #	Description	Source/Method
Polyclonal antibody	Y	JP151	ApoC2 antibody	In vivo
	٠٠٠٠	125-20	ApoC2, purity ≥ 98%	Human plasma
Native antigen		LA247	ApoC2, purity > 95%, lyophilized	Human plasma

# **Apolipoprotein C3 (ApoC3)**

Apolipoprotein C3 (ApoC3) plays a role in triglyceride metabolism and may regulate several pathways beyond lipid metabolism, influencing the risk of cardiovascular, metabolic, and neurological diseases.

Product Type		Catalog #	Description	Source/Method
Polyclonal antibody	Y	JP184	ApoC2 antibody	In vivo
	٠٠٠٠٠	125-21	ApoC3, purity > 98%	Human plasma
Native antigen		LA248	ApoC3, purity ≥ 95%, lyophilized	Human plasma

# **Apolipoprotein E (ApoE)**

Apolipoprotein E (ApoE) is a protein involved in the metabolism of fats in mammals, playing a crucial role in lipid transport and cholesterol homeostasis.

Product Type		Catalog #	Description	Source/Method
Native antigen		125-29	ApoE, purity ≥ 95%	Human plasma
	٠٠٥٠	125-30	ApoE, purity ≥ 98%	Human plasma
		LA163	ApoE, purity ≥ 95%	Human plasma

#### Apolipoprotein Lp(a) [ApoLp(a)]

Apolipoprotein(a) [ApoLp(a)] is the protein component of Lp(a), which is a complex of LDL particles and ApoLp(a). This protein is involved in lipid metabolism and is a significant independent risk factor for atherosclerotic cardiovascular disease (CVD) and calcific valvular aortic stenosis.

Product Type		Catalog #	Description	Source/Method
Polyclonal antibody	٠٠٠٠٠	JP078	ApoLp(a) antibody	In vivo

# **Brain Natriuretic Peptide (BNP)**

B-type natriuretic peptide (BNP) is a cardiac hormone released by the heart in response to ventricular myocardium wall stress. In patients with heart failure, BNP levels are elevated easures of cardiac function and diagnosis of heart failure.

Product Type		Catalog #	Description	Source/Method
Monoclonal antibody		100970	Anti-h BNP 11904	In vitro
		100971	Anti-h BNP 11906	In vitro
		100973	Anti-h BNP 11908	In vitro
	Y	HM816	BNP antibody	In vivo
		HM817	BNP antibody	In vivo
		HM818	BNP antibody	In vivo
		HM819	BNP antibody	In vivo
Synthetic antigen	٠٠٠٠	129-10	BNP-32, purity ≥95%, lyophilized	Synthetic

#### **Cholesterol**

Cholesterol is a waxy, fat-like substance found in all human cells. The body needs cholesterol to make hormones, vitamin D, and substances that help digest food.

Product Type		Catalog #	Description	Source/Method
Native antigen		185-10	Cholesterol concentrate	Bovine serum
	3.	185-13	Cholesterol concentrate	Bovine serum
	(F)	185-20	Cholesterol concentrate (BCCL, LDL/HDL)	Bovine serum
		360-35	Cholesterol concentrate (LDL/HDL Blend)	Human plasma

### **Chylomicrons (ULDL)**

Chylomicrons or ultra low-density lipoproteins, are lipoprotein particles that consist of triglycerides, phospholipids, cholesterol, and proteins. They transport dietary lipids from the intestines to other locations in the body.

Product Type		Catalog #	Description	Source/Method
Native antigen	4-12-1	194-14	Chylomicrons (ULDL)	Human plasma

# Copeptin

Copeptin is a acid glycopeptide. It has been suggested as a biomarker in diagnosis and prognosis of several diseases, such as acute myocardial infarction, heart failure, hyponatremia, and sepsis.

Product Type		Catalog #	Description	Source/Method
Monoclonal antibody		100638	Anti-h copeptin 4801	In vitro
		100639	Anti-h copeptin 4802	In vitro
	U	100648	Anti-h copeptin 4806	In vitro
		100649	Anti-h copeptin 4804	In vitro

# **C-Reactive Protein (CRP)**

C-reactive protein (CRP) is a protein found in the blood, and it raises in response to inflammation. CRP values are useful in determining disease progress or the effectiveness of treatments. C-reactive protein can be an indicator of how at risk you are for developing cardiovascular problems. This is because the development of atherosclerosisis associated with inflammation within the vessel walls.

Product Type		Catalog #	Description	Source/Method
		100058	Anti-h CRP 6404 (2 mg/ml)	In vitro
		100061	Anti-h CRP 6404 (6 mg/ml)	In vitro
		100145	Anti-h CRP 6402	In vitro
		100146	Anti-h CRP 6403	In vitro
		100147	Anti-h CRP 6407	In vitro
Monoclonal antibody	Y	100358	Anti-h CRP 6405	In vitro
		HM122	CRP antibody	In vivo
		HM573	CRP antibody	In vivo
		HM574	CRP antibody	In vivo
		HM751	CRP antibody	In vivo
		HM752	CRP antibody	In vivo
Polyclonal antibody	Y	GCRP-80A	CRP antibody	In vivo
Recombinant antigen	٠٠٠٠	140-11R	CRP, purity ≥ 99%	E. coli
Native antigen	6-1 1 1 1	140-11	CRP, purity ≥ 99%	Human pleural fluid

# **Creatine Kinase (CK)**

Creatine kinase (CK) is found in cardiac muscle, skeletal muscle, and brain. Total CK can be separated into three major isoenzymes: CK-BB, found predominantly in brain and lung; CK-MM, found in skeletal muscle; and CK-MB, found predominantly in heart muscle.

Product Type		Catalog #	Description	Source/Method
Native antigen		190-10	CK, lyophilized	Bovine heart
	• <del>‡</del>	191-45	CK, lyophilized	Porcine heart
		191-46	CK, lyophilized	Porcine heart

# Creatine Kinase (CK-BB, CK-MB, CK-MM)

Product Type		Catalog #	Description	Source/Method
		100086	Anti-h CK-MB 7502	In vitro
		100630	Anti-h CK-MB 7501	In vitro
		HM1128	CK-MB antibody	In vivo
Managhandantibada	~	HM144	CK-MB antibody	In vivo
Monoclonal antibody	U	HM575	CK-MB antibody	In vivo
		HM576	CK-MB antibody	In vivo
		HM848	CK-MB antibody	In vivo
		HM849	CK-MB antibody	In vivo
Polyclonal antibody	Y	190-46	CK-MM antibody	In vivo
Recombinant antigen	e∯•	LA374	CK-BB, purity ≥ 95%	Human fluids
Native antigen	4:\$7.	191-24	CK-BB, lyophilized	Porcine brain
		190-24-R1	CK-MB, purity ≥ 95%	Yeast
Recombinant antigen	44	190-24-R2	CK-MB	Yeast
		LA445	CK-MB, purity ≥95%	
Native antigen	3.	190-24	CK-MB	Human heart
	٠٠٠٠٠	190-24A	CK-MB, purity ≥ 99%	Human heart
Recombinant antigen	4-1/2-2	LA373	CK-MM, purity ≥95%	
Native antigen	•‡•	190-29	CK-MM, lyophilized	Human skeletal muscle

# **Cystatin C**

Cystatin C is an emerging renal biomarker. It is used for the diagnosis of chronic kidney disease. Cystatin C has also been associated with an increased risk of cardiovascular disease and heart failure.

Product Type		Catalog #	Description	Source/Method
Monoclonal antibody		100659	Anti-h cystatin C 10005	In vitro
		100690	Anti-h cystatin C 10002	In vitro
	Y	100702	Anti-h cystatin C 10001	In vitro
		HM367	Cystatin C antibody	In vivo
		HM368	Cystatin C antibody	In vivo
Polyclonal antibody	Y	JP089	Cystatin C antibody	In vivo
Recombinant antigen	4:\$2.	610100	Cystatin C, 100 μg, lyophilized	E. coli
Native anigen	6- <sup>1</sup> / <sub>2</sub> -3	194-51	Cystatin C, purity ≥ 96%, lyophilized	Human urine

# Medix Biochemica

# D-Dimer (DD)

D-dimer (DD) is a fibrin degradation product created during fibrinolysis when plasmin degrades the fibrin clot. D-dimer test can be used to exclude deep venous thrombosis (DVT), pulmonary embolism (PE) or disseminated intravascular coagulation (DIC). D-dimer is also valuable for monitoring patients during and after anticoagulant treatment for recurrent DVT.

Product Type		Catalog #	Description	Source/Method
		100204	Anti-h D-dimer 1401	In vitro
		100205	Anti-h D-dimer 1402	In vitro
		100228	Anti-h D-dimer 1403	In vitro
		100479	Anti-h D-dimer 1404	In vitro
		100480	Anti-h D-dimer 1405	In vitro
		100482	Anti-h D-dimer 1407	In vitro
		100799	Anti-h D-dimer 1408	In vitro
	•	100800	Anti-h D-dimer 1409	In vitro
Monoclonal antibody		HM1408	D-dimer antibody	In vitro
		HM1409	D-dimer antibody	In vitro
		HM354	D-dimer antibody	In vivo
		HM355	D-dimer antibody	In vivo
		HM694	D-dimer antibody	In vivo
		HM695	D-dimer antibody	In vivo
		HM812	D-dimer antibody	In vivo
		HM867	D-dimer antibody	In vivo
		HM868	D-dimer antibody	In vivo
		200-09	D-dimer, control grade, purity ≥ 50%	Human plasma
Notive entigen		200-12	D-dimer, purity ≥ 80%	Human plasma
Native antigen	4.00	200-13	D-dimer, purity ≥ 95%	Human plasma
		LA482	D-dimer, purity ≥ 90%	Human plasma

# **Digoxin**

Digoxin is used to treat congestive heart failure, usually in combination with a diuretic (water pill) and an angiotensin-converting enzyme (ACE) inhibitor. It is also used to treat a heart rhythm problem called atrial fibrillation.

Product Type		Catalog #	Description	Source/Method
Monoclonal antibody		HM1210	Digoxin antibody	In vivo
		HM1211	Digoxin antibody	In vivo
	Y	HM1212	Digoxin antibody	In vivo
		HM1213	Digoxin antibody	In vivo
		HM1214	Digoxin antibody	In vivo

# Fatty Acid Binding Protein 3 (FABP3)

The fatty-acid binding proteins (FABPs) are a family of carrier proteins for fatty acids and other lipophilic substances present abundantly in the myocardium. When the myocardium is injured, as in the case of myocardial infarction, H-FABP are released into the circulation and H-FABP can be used as a biochemical diagnostic marker in the early phase of acute myocardial infarction (AMI).

Product Type		Catalog #	Description	Source/Method
		100292	Anti-h FABP3 2302	In vitro
		100293	Anti-h FABP3 2303	In vitro
Monoclonal antibody	Y	100294	Anti-h FABP3 2304	In vitro
		HM565	H-FABP antibody	In vitro
		HM566	H-FABP antibody	In vitro
Recombinant antigen	***	610043	FABP3, 100 μg, lyophilized	E. coli
Recombinant antigen		LA370	H-FABP, purity ≥ 95%	E. coli
		276-06	H-FABP, purity ≥ 98%	Human liver
		276-10	FABP3, purity ≥ 98%	Human heart
Native antigen	6-1 <sup>1</sup> / <sub>2</sub> -3	276-12	FABP3, purity ≥ 98%, lyophilized	Human heart
		276-18	FABP3, purity ≥ 95%	Porcine heart
		LA153	FABP3, purity ≥ 98%	Human cardiac tissue

#### Galectin-3

Galectin-3 is a soluble lectin that binds sugars found on several proteins. It is a pro-inflammatory and profibriotic marker involved in fibrosis of various organs, including heart, vessels, lungs, liver, and kidneys. It is upregulated in chronic inflammatory diseases, heart failure, hypertension and atherosclerotic lesions, and it is involved in several pathophysiological processes including cancer, liver cirrhosis, and diabetes mellitus.

Product Type		Catalog #	Description	Source/Method
		100730	Anti-h galectin-3 10301	In vitro
		100731	Anti-h galectin-3 10302	In vitro
		100732	Anti-h galectin-3 10303	In vitro
	~	100733	Anti-h galectin-3 10304	In vitro
Monoclonal antibody	U	100734	Anti-h galectin-3 10305	In vitro
		855.610.005	Galectin-3 antibody B-S43, azide free	In vivo
Recombinant antigen		855.613.020	Galectin-3 antibody B-S43, unconjugated	In vivo
		855.620.005	Galectin-3 antibody B-E53, azide free	In vivo
		280-15	Galectin-3, purity ≥ 90%	E. coli
	•‡•	610144	Galectin-3, 100 μg	E. coli

### **Growth Differentiation Factor 15 (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.

Product Type		Catalog #	Description	Source/Method
		100658	Anti-h GDF-15 4902	In vitro
		100688	Anti-h GDF-15 4901	In vitro
Monoclonal antibody	Y	100836	Anti-h GDF-15 4903	In vitro
		100837	Anti-h GDF-15 4904	In vitro
		100838	Anti-h GDF-15 4905	In vitro

#### **HDL Cholesterol**

HDL (high-density lipoprotein) cholesterol, "good" cholesterol, absorbs cholesterol in the blood and carries it back to the liver. The liver then flushes it from the body. High levels of HDL cholesterol can lower your risk for heart disease and stroke.

Product Type		Catalog #	Description	Source/Method
Native antigen	•	361-10	HDL	Human plasma
		361-12	HDL, sterile filtered	Human plasma

#### **LDL Cholesterol**

LDL (low-density lipoprotein) cholesterol, "bad" cholesterol, makes up most of your body's cholesterol. High levels of LDL cholesterol raise your risk for heart disease and stroke.

Product Type		Catalog #	Description	Source/Method
Native antigen		360-10	LDL	Human serum
	360-12	LDL, 0.2 micron filtered	Human plasma	
	3.	360-13	LDL, low triglycerides	Human plasma
		360-16	LDL, preservative added	Human plasma
		360-30	LDL, purity ≥ 95%	Human plasma
		360-31	LDL, oxidized, purity ≥ 95%	Human plasma

# Lipoprotein(a) [Lp(a)]

Lipoprotein (a) [Lp (a)] is one type of LDL or low-density lipoprotein. Publications have shown that high levels of lipoprotein (a) in humans is related to a higher risk of heart and blood vessel disease.

Product Type		Catalog #	Description	Source/Method
Polyclonal antibody	Y	400-45	Lp (a) antibody	In vivo
Native antigen	+Ç.	LA447	Lp (a), purity ≥ 90%	Human serum

# Lipoprotein-Associated Phospholipase A2 (Lp-PLA2)

Lipoprotein-associated phospholipase A2 (Lp-PLA2) is an enzyme that breaks down oxidized low-density lipoprotein in the vascular wall. Higher levels of Lp-PLA2 activity are thought to promote atherosclerotic plaque formation.

Product Type		Catalog #	Description	Source/Method
		100751	Anti-h Lp-PLA2 11202	In vitro
		100753	Anti-h Lp-PLA2 11207	In vitro
	Y	100755	Anti-h Lp-PLA2 11209	In vitro
Monoclonal antibody	U	100818	Anti-h Lp-PLA2 11205	In vitro
		HM820	Lp-PLA2 antibody	In vivo
		HM821	Lp-PLA2 antibody	In vivo
Recombinant antigen	•‡•	400-60	Lp-PLA2, purity ≥ 90%	E. coli

# Myeloperoxidase (MPO)

Myeloperoxidase (MPO) is a peroxidase enzyme, which is most abundantly expressed in neutrophils. It produces hypohalous acids to carry out their antimicrobial activity. Elevated MPO levels have been shown to be a significant independent risk factor for a major adverse cardiac event (MACE).

Product Type		Catalog #	Description	Source/Method
Monoclonal antibody		100266	Anti-h MPO 1701	In vitro
	Y	100267	Anti-h MPO 1702	In vitro
		100268	Anti-h MPO 1703	In vitro
	٠٠٠٠	426-10	MPO, purity ≥ 96%	Human neutrophils
Native antigen		426-10LV	MPO, purity ≥ 96%, lyophilized	Human neutrophils
		LA179	MPO, purity ≥ 95%, lyophilized	Human neutrophils

# Myoglobin

Myoglobin is a single-chain globular protein, containing a heme prosthetic group in the center around which the remaining apoprotein folds. It is the primary oxygen-carrying pigment of muscle tissues. Myoglobin is a sensitive marker for muscle injury.

Product Type		Catalog #	Description	Source/Method
		100078	Anti-h myoglobin 7005	In vitro
		100354	Anti-h myoglobin 7004	In vitro
		100378	Anti-h myoglobin 7001	In vitro
		HM212	Myoglobin antibody	In vivo
Monoclonal antibody	Y	HM213	Myoglobin antibody	In vivo
		HM687	Myoglobin antibody	In vivo
		HM688	Myoglobin antibody	In vivo
		HM704	Myoglobin antibody	In vivo
		HM705	Myoglobin antibody	In vivo
Decembinant autimon	٠٠٠	610030	Myoglobin, 100 μg, lyophilized	E. coli
Recombinant antigen	<b>A.S.</b>	LA372	Myoglobin, purity ≥ 95%	E. coli
Night	eş.	431-11	Myoglobin, purity ≥ 99%	Human heart
Native antigen		431-18	Myoglobin, purity ≥ 90%	Mouse heart

# **Neutrophil Gelatinase-Associated Lipocalin (NGAL)**

Neutrophil gelatinase-associated lipocalin (NGAL) is a small glycoprotein. It is associated with antimicrobial defense, and in the distal tubules and collecting duct of the kidney. Elevated levels of blood and urine NGAL are associated with acute or chronic renal failure.

Product Type		Catalog #	Description	Source/Method
		100579	Anti-h NGAL 4202	In vitro
		100580	Anti-h NGAL 4203	In vitro
Monoclonal antibody	Y	100581	Anti-h NGAL 4204	In vitro
		100582	Anti-h NGAL 4205	In vitro
		HM306	NGAL antibody	In vivo
		HM307	NGAL antibody	In vivo
	•	342-49R	NGAL, purity ≥ 96%, lyophilized	Pichia pastoris (Yeast)
Recombinant antigen		610012	NGAL, lyophilized	E. coli
		LA312	NGAL, purity ≥ 98%	E. coli
Native antigen	<del>•</del> ‡•	342-49	NGAL, purity ≥ 90%	Human leukocytes

# N-Terminal Pro-B-Type Natriuretic Peptide (NT-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.

Product Type	Catalog #	Description	Source/Method
	100521	Anti-h NT-proBNP 1306	In vitro
	100710	Anti-h NT-proBNP 1309	In vitro
	100712	Anti-h NT-proBNP 1308	In vitro
	100716	Anti-h NT-proBNP 1311	In vitro
	100717	Anti-h NT-proBNP 1312	In vitro
	100718	Anti-h NT-proBNP 1310	In vitro
	100719	Anti-h NT-proBNP 1307	In vitro
	140010	Anti-h NT-proBNP RC1306	In vitro
	140011	Anti-h NT-proBNP RC1307	In vitro
Monoclonal antibody	₩071	NT-proBNP (13-27) antibody	In vivo
	HM074	NT-proBNP (61-76) antibody	In vivo
	HM1196	NT-proBNP (38-44) antibody	In vitro
	HM146	NT-proBNP (38-44) antibody	In vivo
	HM148	NT-proBNP (27-31) antibody	In vivo
	HM209	NT-proBNP (39-76) antibody	In vivo
	HM210	NT-proBNP (13-27) antibody	In vivo
	HM315	NT-proBNP (13-27) antibody	In vivo
	HM316	NT-proBNP (61-76) antibody	In vivo
	HM899	NT-proBNP (42-46) antibody	In vivo
Polyclonal antibody	<b>₩</b> JP190	NT-proBNP antibody	In vivo
	610090	NT-proBNP, 100 μg, lyophilized	E. coli
Recombinant antigen	<b>♣</b> LA313	NT-proBNP, purity ≥ 95%	E. coli
	LA371	NT-proBNP, purity ≥ 95%	E. coli

#### **Plasmin**

Plasmin is an enzyme present in blood that degrades many blood plasma proteins, including fibrin clots.

Product Type		Catalog #	Description	Source/Method
Native antigen	6-1 <sup>2</sup> / <sub>2</sub> -3	491-41	Plasmin, purity ≥ 90%, lyophilized	Human plasma

# Plasminogen

Plasminogen is a plasma protein that exists in various zymogenic forms. Plasmin, the proteolytically active form of plasminogen, is known for its essential role in fibrinolysis.

Product Type		Catalog #	Description	Source/Method
Native antigen	6. 1. 1.	491-30	Plasminogen (PLG), purity ≥ 95%, lyophilized	Human plasma

#### **Prothrombin**

Prothrombin is proteolytically cleaved by the prothrombinase enzyme complex to form thrombin.

Product Type		Catalog #	Description	Source/Method
Native antigen	• <del>‡</del>	494-23	Prothombin, purity ≥ 90%	Human plasma

#### Renin

Renin, also known as angiotensinogenase, is an aspartic protease protein and enzyme secreted by the kidneys. It participates in the body's renin—angiotensin—aldosterone system, which increases the volume of extracellular fluid and causes arterial vasoconstriction.

Product Type		Catalog #	Description	Source/Method
		700025	Anti-h renin 10850	In vitro
Monoclonal antibody	Y	700026	Anti-h renin 10851	In vitro
		700030	Anti-h renin 10852	In vitro

#### ST2

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

Product Type		Catalog #	Description	Source/Method
	100680	Anti-h ST2 10201	In vitro	
		100681	Anti-h ST2 10202	In vitro
Monoclonal antibody	100682	Anti-h ST2 10203	In vitro	
		100683	Anti-h ST2 10204	In vitro
	Y	100684	Anti-h ST2 10205	In vitro
		100685	Anti-h ST2 10206	In vitro
		100686	Anti-h ST2 10207	In vitro
		HM696	ST2 antibody	In vivo
		HM697	ST2 antibody	In vivo
Recombinant antigen	٠ڽؙ	LA446	ST2, purity >95%	Mammalian expression system

#### **Thrombin**

Thrombin is a serine protease enzyme. During the clotting process, prothrombin is proteolytically cleaved by the prothrombinase enzyme complex to form thrombin.

Product Type		Catalog #	Description	Source/Method
Native antigen	528-50	Thrombin, lyophilized	Bovine plasma	
	٠ٷ٠	528-50H	Thrombin, lyophilized	Bovine plasma
	528-70	Thrombin, purity ≥ 95%, lyophilized	Human plasma	

# **Triglycerides**

Triglycerides are a type of lipid composed of an ester and three fatty acid chains. They act as a source of energy in the body and store unused calories.

Product Type		Catalog #	Description	Source/Method
N	٠٠٠٠٠	361-56	Triglyceride fraction	Human plasma
Native antigen	(A)	571-11	Triglyceride fraction	Chicken egg yolk

# **Troponin Complex**

The troponin complex is made up of three components: the calcium binding subunit, troponin C (TnC); the inhibitory subunit, troponin I (TnI); and an elongated protein, troponin T (TnT), that binds both TnC and TnI and anchors the entire complex to tropomyosin.

Product Type		Catalog #	Description	Source/Method
Native antigen	٠ڽٛ٠	550-10	Troponin complex (I-T-C)	Human heart

# Medix Biochemica

# Troponin I (TnI)

Troponin I (TnI), the inhibitory subunit, is measured in serum cardiac troponin tests, which can help diagnose several different heart disorders, especially myocardial infarction.

Product Type	Catalog #	Description	Source/Method
	100125	Anti-h cTnl 9705	In vitro
	100129	Anti-h cTnl 9701	In vitro
	100180	Anti-h cTnl 9707	In vitro
	100181	Anti-h cTnl 9703	In vitro
	140000	Anti-h cTnl RC9701	In vitro
	140020	Anti-h cTnl RC9707	In vitro
	700050	Anti-h cTnl RC9750	In vitro
Monoclonal antibody	HM192	TnI (41-49) antibody	In vivo
	HM200	TnI (13-22) antibody	In vivo
	HM233	TnI (24-40) antibody	In vivo
	HM412	TnI (41-49) antibody	In vivo
	HM413	TnI (24-40) antibody	In vivo
	HM456	TnI (41-60) antibody	In vivo
	HM896	TnI (27-40) antibody	In vitro
	HM897	TnI (41-49) antibody	In vitro
	HM898	TnI (85-92) antibody	In vitro
	610102	cTnI, 100 μg, lyophilized	E. coli
Recombinant antigen	<b>A146</b>	TnI, purity ≥ 98%	E. coli
	LA369L	TnI, purity ≥ 95%	E. coli
Native antigen	<b>550-11</b>	TnI, purity ≥ 98%	Human heart

# Troponin T (TnT)

Troponin T (TnT) binds both TnC and Tnl and anchors the entire complex to tropomyosin. Serum cardiac troponin tests can be used to help diagnose several different heart disorders, especially myocardial infarction.

Product Type		Catalog #	Description	Source/Method
		100660	Anti-h cTnT 3701	In vitro
		100698	Anti-h cTnT 3710	In vitro
Managlanal autibadu	Y	100699	Anti-h cTnT 3712	In vitro
Monoclonal antibody		100700	Anti-h cTnT 3703	In vitro
		100701	Anti-h cTnT 3711	In vitro
		100704	Anti-h cTnT 3708	In vitro
Recombinant antigen	٠٠٢٠	610101	cTnT, 100 μg, lyophilized	E. coli
Native antigen		550-21	TnT, purity ≥ 98%	Human heart
	•‡•	LA149	TnT, purity ≥ 95%	Human cardiac tissue

# **Very Low Density Lipoprotein (VLDL)**

Very-low-density lipoprotein, density relative to extracellular water, is a type of lipoprotein made by the liver. VLDL is one of the five major groups of lipoproteins that enable fats and cholesterol to move within the water-based solution of the bloodstream.

Product Type		Catalog #	Description	Source/Method
Native antigen	•‡•	365-10	VLDL	Human plasma



Discover our Cardiovascular Portfolio.

18 19

# Medix Biochemica

# **Biospecimens**

Product Type	Catalog #	Description
Canabasaninal fluid (CCF)	991-19-P	CSF, pooled human donors
Cerebrospinal fluid (CSF)	991-19-S	CSF, single human donor
	991-58-GER1/2/3	Plasma, geriatric, single human donor
	991-58-P	Plasma, pooled human donors
	991-58-PS	Plasma, patient sample
	991-58-PS-CK	Plasma, creatine kinase, patient sample
	991-58-PS-PCT	Plasma, procalcitonin, patient sample
Diame	991-58-PS-TNI	Plasma, troponin I, patient sample
Plasma	991-58-S	Plasma, single human donor
	991-58-S-COPD	Plasma, COPD, single human donor
	991-58-S-HD	Plasma, heart disease, single human donor
	991-58-S-HT	Plasma, hypertension, single human donor
	991-58-S-NTPBNP	Plasma, NT-proBNP, single human donor
	991-58-S-OB	Plasma, obese patient, single human donor
	991-05-GER1/2/3	Saliva, geriatric, single human donor
Saliva	991-05-P	Saliva, pooled human donors
	991-05-S	Saliva, single human donor
	991-24-GER1/2/3	Serum, geriatric, single human donor
	991-24-P	Serum, pooled human donors
	991-24-PS	Serum, normal, patient sample
	991-24-S-ANEM	Serum, anemia, single human donor
Corum	991-24-PS-ALB	Serum, albumin, patient sample
Serum	991-24-PS-CREA	Serum, creatinine, patient sample
	991-24-PS-CYSC	Serum, cystatin C, patient sample
	991-24-PS-FERR	Serum, ferritin, patient sample
	991-24-PS-HAPT	Serum, haptoglobin, patient sample

# Biospecimens

Product Type	Catalog #	Description
	991-24-PS-HCY	Serum, homocysteine (Hcy), patient sample
	991-24-PS-TNI	Serum, troponin I, patient sample
	991-24-PS-TRIG	Serum, triglyceride, patient sample
	991-24-S	Serum, single human donor
Serum	991-24-S-CRP	Serum, c-reactive protein, single human donor
Seruiii	991-24-S-HD	Serum, heart disease, single human donor
	991-24-S-IL6	Serum, interleukin-6 (IL-6), single human donor
	991-24-S-NTPBNP	Serum, NT-proBNP, single human donor
	991-24-S-OB	Serum, obese patient, single human donor
	991-24-S-SEPSIS	Serum, sepsis, single human donor
Tears	991-12-P	Tears, pooled human donors
	991-12-S	Tears, single human donor
	991-03-GER1/2/3	Urine, geriatric, single human donor
Urine	991-03-P	Urine, pooled human donors
	991-03-S	Urine, single human donor
	991-50-GER1/2/3	Whole blood, geriatric, single human donor
	991-50-P	Whole blood, pooled human donors
Whole blood	991-50-P-A1C	Whole blood, hemoglobin A1c (HbA1c), pooled patient samples
	991-50-S	Whole blood, single human donor
	991-50-S-A1C	Whole blood, hemoglobin A1c (HbA1c), patient sample



Discover our Biospecimens Portfolio.

20 21

Notes	Notes



Klovinpellontie 3, Fl-02180 Espoo, Finland medix@medixbiochemica.com



Ordering and product information: **medixbiochemica.com**