

# BioVendor new products

March 11, 2015

Dear customer, we would like to introduce our new products and hope you will find them interesting. Below is a list of events, in which we plan to participate in 2015:

**11<sup>th</sup> Spring School** (08 \ 03 \ 2015 - 13 \ 03 \ 2015 - Ettal)

**WCN** (13 \ 03 \ 2015 - 17 \ 03 \ 2015 - Cape Town)

**DGE 2015** (18 \ 03 \ 2015 - 21 \ 03 \ 2015 - Lübeck)

**AACC** (26 \ 07 \ 2015 - 30 \ 07 \ 2015 - Atlanta)

**MEDICA 2015** (16 \ 11 \ 2015 - 19 \ 11 \ 2015 - Düsseldorf)

## IMMUNOASSAYS

### » FEATURED PRODUCT: HUMAN AFAMIN ELISA

A unique commercial ELISA kit for the quantification of AFAMIN – a novel independent predictor for the development of insulin resistance and metabolic syndrome.

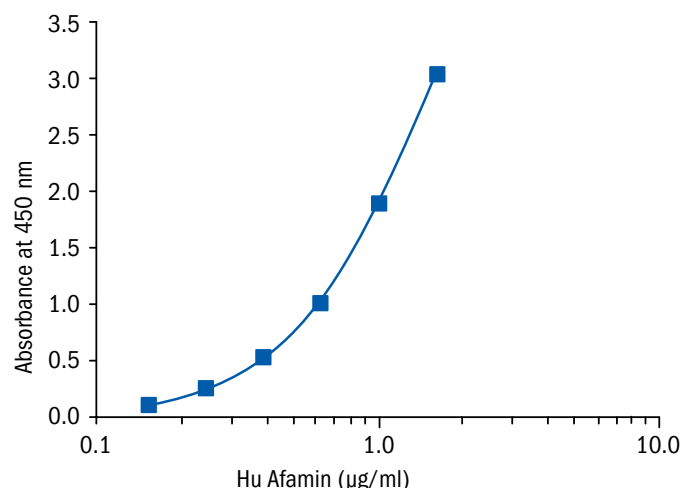
- Patented: **“Method for diagnosing the metabolic syndrome (ms)”**, WO 2009029971 A1
- Validated for human **serum** and **plasma** (EDTA, Heparin, citrate) samples
- Short assay protocol (2h 15min)
- All the test procedures can be performed in room temperature
- Areas of investigation: **Energy metabolism and body weight regulation**

Mature human afamin, the product of the AFM gene, is a single chain 75kDa protein consisting of 578 amino acid residues. AFM is a member of the albumin gene family.

Afamin is predominantly expressed in the liver and secreted into the bloodstream; minor expressions have been described also in the human brain, heart, kidney, testis and ovary. Afamin possesses multiple binding sites for  $\alpha$ -tocopherol and  $\gamma$ -tocopherol, two of the most important forms of vitamin E.

Human plasma afamin was very recently reported to be highly significantly associated with criteria for metabolic syndrome. Data from a prospective study as well as corresponding data from afamin-transgenic mice suggest an active role of afamin in the development of metabolic syndrome. In patients with polycystic ovary syndrome, afamin might serve as a discriminatory predictive parameter of insulin resistance and metabolic syndrome.

Afamin has also been identified as a potential biomarker for ovarian cancer showing significant associations between afamin plasma concentrations and clinical outcomes (response to therapy and survival rates).



### NEW IMMUNOASSAYS

CAT. NO.		NAME	IVD/RUO	ASSAY FORMAT
<a href="#">RD194428100R</a>	Human	Afamin ELISA	RUO	Sandwich ELISA, HRP-labelled antibody
<a href="#">RD193398200CS</a>	Human	Cystatin B ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD193262200CS</a>	Human	Cysteine-Rich Secretory Protein 3 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191403200CS</a>	Human	Fibronectin ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191437200CS</a>	Human	Galectin-1 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191407100R</a>	Human	Haptoglobin ELISA	RUO	Sandwich ELISA, HRP-labelled antibody

<a href="#">RD193404200CS</a>	Human	Hepsin ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD193444200CS</a>	Human	Chitinase-3-Like Protein 2 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191041200R</a>	Human	Insulin Receptor	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191484200CS</a>	Human	Kallikrein 11 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD194334200R</a>	Human	Lactoferrin ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD193443200CS</a>	Human	Macrophage Migration Inhibitory Factor ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD194440200CS</a>	Human	Matrix Metalloproteinase-2 (MMP-2) ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD193438200CS</a>	Human	Matrix Metalloproteinase-7 (MMP-7) ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD193439200CS</a>	Human	Matrix Metalloproteinase-9 (MMP-9) ELISA, High Sensitivity	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191401200CS</a>	Human	Parvalbumin $\alpha$ ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191304100R</a>	Human	Prolactin-Inducible Protein ELISA	RUO	Sandwich ELISA, HRP-labelled antibody
<a href="#">RD191319200R</a>	Human	Proline-Rich Acidic Protein 1 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191083200CS</a>	Human	Regenerating Islet-Derived Protein 4 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191217210CS</a>	Human	S100A8 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD194218200CS</a>	Human	S100A9 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RAT002R</a>	Human	S-Adenosyl Homocystein (SAH) ELISA	RUO	Competitive ELISA
<a href="#">RAT001R</a>	Human	S-Adenosyl Methionine (SAM) ELISA	RUO	Competitive ELISA
<a href="#">RD191397200CS</a>	Human	Synuclein Gamma ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191400200CS</a>	Human	T-Cell Immunoglobulin and Mucin Domain Containing 4 (TIM4) ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD391160200R</a>	Rat	Trefoil Factor 3 ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD191343100R</a>	Human	Urinary Trypsin Inhibitor ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
<a href="#">RD194442200CS</a>	Human	VEGF-D ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody

## EXPANSION OF IVD PRODUCTS

Within the framework of our continuous expansion of **IVD products**, we are happy to announce that **Human Corticosteroid-Binding Globulin ELISA** and **Human Uromodulin ELISA** are now available for IVD use.

## RECOMBINANT PROTEINS

### » FEATURED PRODUCT: HUMAN SERGLYCIN

Serglycin is an intracellular proteoglycan expressed by hematopoietic cells, but can also be secreted and incorporated into the extracellular matrix. It belongs to a family of small proteoglycans with serine-glycine dipeptide repeats and is modified with various glycosaminoglycan side chains. Serglycin is a dominant proteoglycan in immune cells, but is also expressed by a number of nonhematopoietic cell types, including endothelial cells, chondrocytes and smooth muscle cells. Serglycin synthesized by inflammatory and stromal cells is secreted either constitutively or in a regulated manner. Human serglycin consists of a core protein (17.6 kDa) decorated with glycosaminoglycan chains (e.g., chondroitin-4-sulfate (CS-4), CS-6, CSE, CSB, or heparin). The core protein of human serglycin has 158 amino acid residues that form three functional domains.

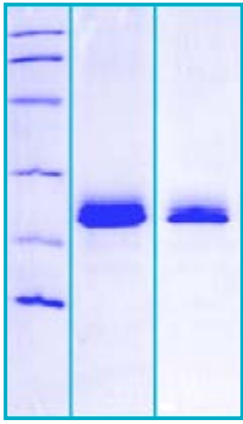
Serglycin has been extensively studied in the immune system, where it is expressed and is essential to the functions of mast cells, cytotoxic T-lymphocytes (CTL), monocytes, and neutrophils. Serglycin is involved in apoptosis, cell growth, inflammation, hemostasis and the reproductive system.

Serglycin plays a major role in various diseases, including cancer (tumor metastasis) and inflammation. Serglycin has been shown to be a biomarker of acute myeloid leukemia (levels are higher than in acute lymphoblastic leukemia patients), invasive nasopharyngeal carcinoma (NPC) and breast cancer. Serglycin demonstrates a role in protecting myeloma cells from complement attacks induced by antibody immunotherapy, therefore promoting the survival of malignant myeloma cells.

Serglycin is involved in platelet-associated disorders (gray platelet syndrome, impaired hemostasis) and may also affect atherosclerosis and the progression of coronary arterial disease.

As a secreted glycoprotein, serglycin could be an ideal serum marker for predicting and monitoring cancer progression. Serglycin expression was found to distinguish acute myeloid leukemia from acute lymphoblastic leukemia.

BioVendor's Human Serglycin is a 137-AA recombinant protein expressed in human cell line HEK293. The C-terminal His-tag sequence (HHHHHH) has been added to make detection, immobilization or purification possible. The protein is in 0.25–0.70 mg/ml solution in phosphate buffered saline, 20 % (w/v) glycerol, filtered (0.4  $\mu$ m), frozen.



#### 14 % SDS-PAGE separation of Human Serglycin (HEK):

1. M.W. marker – 14, 21, 31, 45, 66, 97 kDa
2. Reduced and boiled sample, 2.5 µg/lane
3. Non-reduced and non-boiled sample, 2.5 µg/lane

## RELATED PRODUCTS

[RD172368100](#) Serglycin Human *E. coli*

## NEW RECOMBINANT PROTEINS

CAT. NO.	NAME	SIZE	SOURCE
<a href="#">RD372347100</a>	Rat Betatrophin	0.1 mg	<i>E. coli</i>
<a href="#">RD172418100</a>	Human Cadherin-1	0.1 mg	HEK293
<a href="#">RD172177100</a>	Human CTRP4	0.1 mg	HEK293
<a href="#">RD172361100</a>	Human Cyclophilin C	0.1 mg	<i>E. coli</i>
<a href="#">RD172362100</a>	Human Cyclophilin-40	0.1 mg	<i>E. coli</i>
<a href="#">RD172430100</a>	Human Ephrin Type-A Receptor 2	0.1 mg	HEK293
<a href="#">RD172478100</a>	Human FAM19A5	0.1 mg	<i>E. coli</i>
<a href="#">RD172393100</a>	Human FGF-18	0.1 mg	<i>E. coli</i>
<a href="#">RD172270100</a>	Human Gastrokine-3	0.1 mg	<i>E. coli</i>
<a href="#">RD172346100</a>	Human Glypican-4	0.1 mg	<i>E. coli</i>
<a href="#">RD172409100</a>	Human Chitinase-3-Like Protein 2	0.1 mg	<i>E. coli</i>
<a href="#">RD172433100</a>	Human Inositol Oxygenase	0.1 mg	<i>E. coli</i>
<a href="#">RD172201100</a>	Human Insulin-Degrading Enzyme	0.1 mg	<i>E. coli</i>
<a href="#">RD172436100</a>	Human Kallistatin	0.1 mg	HEK293
<a href="#">RD172150100</a>	Human KIM-1	0.1 mg	HEK293
<a href="#">RD172256100</a>	Human Lysophosphatidylcholine Acyltransferase 1	0.1 mg	<i>E. coli</i>
<a href="#">RD172188100-HEK</a>	Human Mammaglobin A (Fc Chimera)	0.1 mg	HEK293
<a href="#">RD172005100-HEK</a>	Human Myostatin	0.1 mg	HEK293
<a href="#">RD172058100-HEK</a>	Human Myostatin Propeptide	0.1 mg	HEK293
<a href="#">RD172313100</a>	Human NKG2D Ligand 3	0.1 mg	<i>E. coli</i>
<a href="#">RD172314100</a>	Human NKG2D Ligand 4	0.1 mg	<i>E. coli</i>
<a href="#">RD172477100</a>	Human Pentraxin 3	0.1 mg	HEK293
<a href="#">RD172473100</a>	Human Proprotein Convertase Subtilisin/Kexin Type 9	0.1 mg	HEK293
<a href="#">RD172167100-HEK</a>	Human Renin	0.1 mg	HEK293
<a href="#">RD172368100-HEK</a>	Human Serglycin	0.1 mg	HEK293
<a href="#">RD172411100</a>	Human Thymic Stromal Lymphopoietin	0.1 mg	<i>E. coli</i>
<a href="#">RD172307100</a>	Human Vanin-1	0.1 mg	<i>E. coli</i>

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