# BioVendor new products

October, 2018

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 2018:

MEDICA 2018 (12  $\setminus$  11  $\setminus$  2018 - 15  $\setminus$  11  $\setminus$  2018 - Dusseldorf)

## miRNA

## **NEW miREIA KITS**

CAT. NO.	STATUS	NAME	ASSAY FORMAT
RDM0010H	New	hsa-miR-197-3p	miREIA – miRNA enzyme immunoassay
RDM0022H	New	hsa-miR-486-5p	miREIA – miRNA enzyme immunoassay
RDM0021H	New	hsa-miR-423-3p	miREIA – miRNA enzyme immunoassay
<u>RDM0008H</u>	New	hsa-miR-16-5p	miREIA – miRNA enzyme immunoassay
<u>RDM0012H</u>	New	hsa-miR-24-3p	miREIA – miRNA enzyme immunoassay
<u>RDM0023H</u>	New	hsa-miR-let-7a-5p	miREIA – miRNA enzyme immunoassay



#### Introducing miREIA Kits - now more affordable for a limited time!

We have reduced the price of miREIA kits

You can order each of them for 495 EUR

www.biovendor.com/mirna

#### miREIA - miRNA Enzyme Immunoassay

## FEATURED PRODUCT: hsa-miR-let-7a-5p miREIA

Let-7a-5p, a member of the let-7 miRNA family acts as a tumor suppressor. Cell proliferation, colony formation, migration and invasion were decreased after induced overexpression of let-7a in breast cancer cells. Down-regulation of miR-let-7a-5p is associated with oncological diseases. Reduced levels of miR-let-7a-5p were reported in lung squamous carcinoma, colorectal cancer, urothelial tumors, lymphoms, breast cancer and many other diagnoses.



Apart from its role in tumor suppression, miR-let-7a is involved in cell proliferation pathway in human cells. miRNA-let-7a can act as a regulator of the function of microglia in inflammation and is **connected to cerebrovascular** and **neurodegenerative diseases**.

For these and more BioVendor miREIA kits, please visit www.biovendor.com/mirna.

microRNAs (miRNAs) are a class of single-stranded non-coding RNA molecules with a length of 19-23 nucleotides. They play a role in negative post-transcriptional regulation by binding to complementary sequences on mRNA and blocking translation into protein.

**miREIA** is a BioVendor proprietary method basedoon combination of immunoassay and molecular biological principles. The main advantage is the **quantitative determination of miRNA** concentrations.

#### **NEW IMMUNOASSAYS**

CAT. NO.	NAME	IVD/RUO	ASSAY FORMAT
RD191058200R Human	Myostatin (Prodomain Specific) ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody

## FEATURED PRODUCT: HUMAN MYOSTATIN (PRODOMAIN SPECIFIC) ELISA

Myostatin, a muscle-specific transforming growth factor- $\beta$  (TGF- $\beta$ ), negatively regulates skeletal muscle mass.

Two molecules of the **N-terminal prodomain** of myostatin noncovalently binds to and **suppresses** the C-terminal mature domain homodimer as an **inactive circulating Myostatin Latent Complex**. A majority (>70%) of myostatin in serum is bound in the complex.

The circulating Myostatin Latent Complex has significantly reduced activity compared with the mature growth factor and persists as a stable complex that is resistant to the natural antagonist follistatin.

· Validated for human serum, plasma (EDTA, citrate, heparin), urine, and cerebrospinal fluid

- The kit measures total Myostatin Latent Complex and free Myostatin Prodomain
- · Excellent sensitivity (LOD 0.05 ng/ml)

#### **RELATED PRODUCTS**

RD172005300 Myostatin Human *E. coli*RD172005100-HEK Myostatin Human HEK293RD172058100 Myostatin Propeptide Human *E. coli* Tag freeRD172058100-HEK Myostatin Propeptide Human HEK293RD181005220 Myostatin Human, Bovine PAbRD183057050 Myostatin Propeptide Human, Chicken PAbRD1820571004B9 Myostatin Propeptide Human, Mouse MAb, Clone: 4B9RD1820571006E8 Myostatin Propeptide Human, Mouse MAb, Clone: 6E8

## **NEW PROTEINS**

CAT. NO.		NAME	SIZE	SOURCE
RD172367025	Human	Angiotensinogen HEK293	0.025 mg	HEK293
RD172122025-HEK	Human	Lecithin-Cholesterol Acyltransferase	0.025 mg	HEK293
RD172370025	Human	Leukocyte Cell-Derived Chemotaxin-2	0.025 mg	E. coli
RD172114025-HEK	Human	Pigment Epithelium-Derived Factor	0.025 mg	HEK293

## FEATURED PRODUCT: HUMAN ANGIOTENSINOGEN HEK293

Human **angiotensinogen (AGT)** is a component of the renin-aldosterone-angiotensin system (RAAS), a hormone system that **regulates blood pressure** and fluid balance. AGT is the only **precursor of all angiotensin peptides** (I, II, III, and IV) and the cleavage of AGT by renin is the ratelimiting step of RAAS. AGT is **mainly produced in the liver and secreted in plasma** but also is synthesized in adipocytes, proximal tubule epithelial cells, and astrocytes. AGT identified in urine (UAGT) is produced and **secreted by the kidney proximal tubules** and does not come from plasma. UAGT reflects intrarenal angiotensin II activity associated with increased risk for deterioration of renal function in patients with **chronic kidney disease** such as diabetic nephropathy and membranous nephropathy as well as in patients with **acute kidney injury**. Urinary AGT is increased in **hypertensive** patients.

BioVendor produces recombinant Human angiotensinogen in HEK293 cell line. The protein contains 462 AA. MW: 51.0 kDa (calculated).

The AA sequence is identical to UniProtKB acc. No. P01019 (Asp34-Ala485). The recombinant protein contains C-terminal linker (2 extra AA) and C-terminal FLAG-tag (8 extra AA). Protein identity confirmed by LC-MS/MS. Endotoxin-free.



## 12% SDS-PAGE separation of Human AGT:

- 1. M.W. marker 14, 21, 31, 45, 66, 97 kDa
- 2. reduced and heated sample, 2.5 µg/lane
- non-reduced and non-heated sample, 2.5 µg/lane

See more about
Angiotensinogen Human HEK293

RELATED PRODUCTS RD191367100R Angiotensinogen Human ELISA

## **NEW ANTIBODIES**

CAT. NO.		PRODUCT	REACTIVE SP.	SIZE
RD481488100	Anti-Canine	Procalcitonin	Rabbit Polyclonal Antibody	0.1 mg
RD484488100	Anti-Canine	Procalcitonin	Sheep Polyclonal Antibody	0.1 mg

## FEATURED PRODUCTS: ANTI-CANINE PROCALCITONIN RABBIT AND SHEEP POLYCLONAL ANTIBODIES

Procalcitonin (PCT) the precursor of the hormone calcitonin is a 116 amino acid protein with a molecular mass of 13 kDa. The level of procalcitonin in the blood of healthy individuals is low.

Bacterial lipopolysacharide (LPS) is a potent inducer of procalcitonin release into systemic circulation. In humans, procalcitonin levels increase from 3 to 4 hours, peak at about 6 hours and then plateau for up to 24 hours. **PCT concentrations specifically increases in response to bacterial infection**. Today procalcitonin is one of the **earliest and most specific markers of sepsis**.

The antibodies have been obtained from rabbits or sheep, respectively, immunized with a recombinant Canine Procalcitonin produced in E.coli. The antibodies have been immunoaffinity purified using the immunization antigen. The antibodies were validated for ELISA application and extended for veterinary focused product line of BioVendor.

See more about PCT Canine Rabbit PAb or PCT Canine Sheep PAb

#### **RELATED PRODUCTS**

RD491488200R Procalcitonin Canine ELISA RD191006200R Procalcitonin Human ELISA RD472006100 Procalcitonin Canine *E. coli* RD872582100 Procalcitonin Horse *E. coli* RD172006100 Procalcitonin Human *E. coli* RD272006100 Procalcitonin Mouse *E. coli* RD572451100 Procalcitonin Porcine *E. coli* RD372450100 Procalcitonin Rat *E. coli* RD872006100 Procalcitonin Rat *E. coli* 



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