# BioVendor new products

# July, 2019

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 2019:

AACC 2019 (04 \ 08 \ 2019 - 08 \ 08 \ 2019 - Anaheim) MEDICA 2019 (18 \ 11 \ 2019 - 21 \ 11 \ 2019 - Düsseldorf)

# miRNA

## **NEW miREIA KITS**

CAT. NO.	STATUS	NAME	ASSAY FORMAT
<u>RDM0027H</u>	New	hsa-miR-let-7b-5p miREIA	miREIA – miRNA enzyme immunoassay
<u>RDM0029H</u>	New	hsa-miR-210-3p miREIA	miREIA – miRNA enzyme immunoassay
<u>RDM0030H</u>	New	hsa-miR-361-5p miREIA	miREIA – miRNA enzyme immunoassay

## miREIA - miRNA Enzyme Immunoassay

# >> FEATURED PRODUCT: hsa-miR-let7b-5p miREIA

hsa-miR-let-7b-5p, a member of the Let-7 microRNA family, has been found to act in cancer development, inflammation, cardiovascular and neurodegenerative diseases.

#### Oncology

- · tumor suppressor halting cell proliferation, adhesion, and invasion
- $\cdot$  downregulated in breast carcinogenesis and in osteosarcoma tissues and cell lines
- upregulated in prostatic tumor-associated macrophages, modulating the prognosis of prostate cancer

#### Inflammation

- · upregulated in inflamed tissues
- $\cdot$  overexpression of miR-let-7b decreased the expression of the proinflammatory genes
- $\cdot\,$  blocking of miR-let-7b increased proinflammatory cytokine expression
- $\cdot\,$  regulate the inflammatory response in **endometriosis** (together with miR-125b-5p)
- $\cdot$  contributes to the epithelial immune responses against H. <code>pylori</code> infection

## Neurodegenerative diseases

- elevated levels in the cerebrospinal fluid of patients with Alzheimer's disease
  promising blood-derived miRNA biomarker in multiple sclerosis
- 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 based on the 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	
RD191510100CS	Human	Matrix Metalloproteinase-3 ELISA	RUO	Sandwich ELISA, HRP-labelled antibody	

#### **CLEARANCE SALE**

Products are available while stocks last:

<u>RD193444200CS</u> Human Chitinase 3-Like 1 ELISA <u>RD391034200CS</u> Rat Clusterin ELISA <u>RD194440200CS</u> Human Matrix Metalloproteinase-2 (MMP-2) ELISA



# FEATURED PRODUCT: HUMAN MATRIX METALLOPROTEINASE-3 ELISA

Matrix metalloproteinases (MMPs) are a group of enzymes **engaged in the degradation and remodeling of the extracellular matrix** (ECM). These enzymes are involved in connective tissue remodeling occurring in the course of morphogenetic processes. MMPs are a subject of very strict regulation by, among others, their specific inhibitors - tissue inhibitors of metalloproteinases (TIMPs).

#### MMP-3 hydrolyzes components of the extracellular matrix like

proteoglycan, laminin, fibronectin, gelatin and collagen types III, IV, and IX. It also activates pro-MMP-9 and pro-MMP-8 and super-activates plasmin activated MMP-1. MMP-3 was found to be capable of activating the precursor of IL1-beta.

**MMP-3** (also referred to as stromelysin-1) is expressed in fibroblasts, chondrocytes, endothelial cells, macrophages, vascular smooth muscle cells, osteoblasts, and keratinocytes in response to appropriate stimuli.

**MMP-3** is secreted as a latent proenzyme and is activated by a variety of proteinases. The resulting active enzyme consists of a catalytic domain with a zinc-binding motif conserved in metzincins.

- Complementary Human MMP-2, MMP-8, and MMP-9 ELISAs are also available from BioVendor
- · Validated for human serum and saliva
- Excellent sensitivity (LOD 0.1 ng/ml)

## **RELATED PRODUCTS**

<u>RD172510100</u> Matrix Metalloproteinase-3 Human HEK293 <u>RBG10233100</u> Matrix Metalloproteinase-3 Human *E. coli* 

See more about Matrix Metalloproteinase-3 ELISA





# **NEW PROTEINS**

CAT. NO.	STATUS		NAME	SIZE	SOURCE
RD272588100	New	Mouse	Clusterin	0.1 mg	HEK293
RD472586100	New	Canine	CRP, Tag free	0.1 mg	HEK293
RD172577100	New	Human	PDGF-AA	0.1 mg	E. coli
RD172578100	New	Human	PDGF-BB	0.1 mg	E. coli
RD272590025	Coming soon	Mouse	sRAGE	0.025 mg	HEK293

# FEATURED PRODUCT: MOUSE sRAGE, HEK293

The receptor for advanced glycation end products (RAGE) belongs to the immunoglobulin superfamily RAGE is connected to several diseases and pathological states. It was characterized as a receptor for advanced glycation end products (AGEs), but this receptor can also bind other ligands such as proinflammatory S100 proteins/calgranulins, amphoterin or amyloid beta-peptide.

Soluble RAGE can be detected in serum. Because of the possible neutralization effect of sRAGE, studies have examined the significance of **sRAGE** serum concentration in patients with various pathological conditions.

Decreased level of sRAGE is a biomarker for deficient and/or altered inflammatory control in humans. It was shown that a reduced level of sRAGE is associated with a higher risk of coronary disease. In Alzheimer's disease, there is a decrease in serum sRAGE in comparison with patients with vascular dementia and controls. In essential hypertension, it has been shown that sRAGE concentration in serum was inversely associated with pulse pressure. On the other hand, an increased level of serum sRAGE was found in patients with end-stage renal disease and acute lung injury.

BioVendor Mouse Soluble Advanced Glycation End Product-Specific Receptor is a recombinant protein expressed in HEK293 cells. Total 331 AA, MW: 35.2 kDa (calculated). C-terminal Flag-tag 11 AA. Endotoxin < 1.0 EU/µg.

See more about **sRAGE Mouse HEK293** 

## **RELATED PRODUCTS**

<u>RD191116200R</u> Soluble Receptor of Advanced Glycation End-Products (sRAGE) Human ELISA <u>RD172116100</u> Soluble Advanced Glycation End Product-Specific Receptor Human <u>RD172116100-HEK</u> Soluble Advanced Glycation End Product-Specific Receptor Human HEK293 <u>RD184116100</u> Soluble Advanced Glycation End Product-Specific Receptor (sRAGE) Human, Sheep Polyclonal Antibody

## **NEW ANTIBODIES**

CAT. NO.		PRODUCT	REACTIVE SP.	SIZE
RD184037100-01	Anti-Human	Adipocyte Fatty Acid Binding Protein	Sheep Polyclonal Antibody	0.1 mg
RD181247100	Anti-Human	Heart Fatty Acid Binding Protein	Rabbit Polyclonal Antibody	0.1 mg
RD184247100	Anti-Human	Heart Fatty Acid Binding Protein	Sheep Polyclonal Antibody	0.1 mg
RD181473100	Anti-Human	PCSK9	Rabbit Polyclonal Antibody	0.1 mg
RD184473100	Anti-Human	PCSK9	Sheep Polyclonal Antibody	0.1 mg
RD181006100	Anti-Human	Procalcitonin	Rabbit Polyclonal Antibody	0.1 mg
RD184006100	Anti-Human	Procalcitonin	Sheep Polyclonal Antibody	0.1 mg

## FEATURED PRODUCTS: ANTI-HUMAN PCSK9 RABBIT and SHEEP POLYCLONAL ANTIBODIES

PCSK9 protein plays a major regulatory role in cholesterol homeostasis, mainly by reducing LDL-Receptor levels on the plasma membrane. Reduced LDLR levels result in decreased metabolism of LDL-particles, which could lead to hypercholesterolemia. This activity made PCSK9 a novel target in cholesterol-lowering therapy. The PCSK9 inhibitors (PSK9i) are a new class of injectable drugs that have been shown to dramatically lower LDL-cholesterol levels by up to 60% when combined with a statin. PCSK9 inhibitors are monoclonal antibodies (MAbs), a type of biologic drug.

PCSK9 has a key impact not only on circulating LDL-cholesterol level but also on cardiovascular risk and the atherosclerotic process. The determination of PCSK9 levels is obviously of great diagnostic as well as treatment monitoring importance.

The antibodies used in this assay have been obtained from rabbits or sheep, respectively, immunized with a recombinant Human PCSK9 produced in HEK293 cells. The antibodies have been immunoaffinity-purified using the immunization antigen and were validated for ELISA application.

Applications: ELISA

See more about Anti-Human PCSK9 Rabbit and Sheep Polyclonal Antibodies

## **RELATED PRODUCTS**

<u>RD191473200R</u> PCSK9 Human ELISA <u>RD172473100</u> Proprotein Convertase Subtilisin/Kexin Type 9 Human HEK293





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