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)

### miREIA KITS

<table>
<thead>
<tr>
<th>CAT. NO.</th>
<th>STATUS</th>
<th>NAME</th>
<th>ASSAY FORMAT</th>
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<tbody>
<tr>
<td>RDM0027H</td>
<td>New</td>
<td>hsa-miR-let-7b-5p miREIA</td>
<td>miREIA - miRNA enzyme immunoassay</td>
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<tr>
<td>RDM0029H</td>
<td>New</td>
<td>hsa-miR-210-3p miREIA</td>
<td>miREIA - miRNA enzyme immunoassay</td>
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<tr>
<td>RDM0030H</td>
<td>New</td>
<td>hsa-miR-361-5p miREIA</td>
<td>miREIA - miRNA enzyme immunoassay</td>
</tr>
</tbody>
</table>

### 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
- 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
- overexpression of miR-let-7b decreased the expression of the proinflammatory genes
- blocking of miR-let-7b increased proinflammatory cytokine expression
- regulates the inflammatory response in endometriosis (together with miR-125b-5p)
- contributes to the epithelial immune responses against *H. pylori* 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](http://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.

See more about [hsa-miR-let7b-5p miREIA](http://www.biovendor.com/mirna)
NEW IMMUNOASSAYS

<table>
<thead>
<tr>
<th>CAT. NO.</th>
<th>NAME</th>
<th>IVD/RUO</th>
<th>ASSAY FORMAT</th>
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</thead>
<tbody>
<tr>
<td>RD191510100CS</td>
<td>Human Matrix Metalloproteinase-3 ELISA</td>
<td>RUO</td>
<td>Sandwich ELISA, HRP-labelled antibody</td>
</tr>
</tbody>
</table>

CLEARANCE SALE

Products are available while stocks last:

- RD193444200CS Human Chitinase 3-Like 1 ELISA
- RD391034200CS Rat Clusterin ELISA
- RD194440200CS 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

- RD172510100 Matrix Metalloproteinase-3 Human HEK293
- RBG10233100 Matrix Metalloproteinase-3 Human E. coli

See more about Matrix Metalloproteinase-3 ELISA
NEW PROTEINS

<table>
<thead>
<tr>
<th>CAT. NO.</th>
<th>STATUS</th>
<th>NAME</th>
<th>SIZE</th>
<th>SOURCE</th>
</tr>
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<tbody>
<tr>
<td>RD272588100</td>
<td>New</td>
<td>Mouse Clusterin</td>
<td>0.1 mg</td>
<td>HEK293</td>
</tr>
<tr>
<td>RD472586100</td>
<td>New</td>
<td>Canine CRP, Tag free</td>
<td>0.1 mg</td>
<td>HEK293</td>
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<tr>
<td>RD172577100</td>
<td>New</td>
<td>Human PDGF-AA</td>
<td>0.1 mg</td>
<td>E. coli</td>
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<tr>
<td>RD172578100</td>
<td>New</td>
<td>Human PDGF-BB</td>
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<td>E. coli</td>
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<tr>
<td>RD272590025</td>
<td>Coming</td>
<td>Mouse sRAGE</td>
<td>0.025 mg</td>
<td>HEK293</td>
</tr>
</tbody>
</table>

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

RD191116200R Soluble Receptor of Advanced Glycation End-Products (sRAGE) Human ELISA
RD172116100 Soluble Advanced Glycation End Product-Specific Receptor Human
RD172116100-HEK Soluble Advanced Glycation End Product-Specific Receptor Human HEK293
RD184116100 Soluble Advanced Glycation End Product-Specific Receptor (sRAGE) Human, Sheep Polyclonal Antibody
### NEW ANTIBODIES

<table>
<thead>
<tr>
<th>CAT. NO.</th>
<th>PRODUCT</th>
<th>REACTIVE SR</th>
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<tbody>
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<td>RD184037100-01</td>
<td>Anti-Human Adipocyte Fatty Acid Binding Protein</td>
<td>Sheep Polyclonal Antibody</td>
<td>0.1 mg</td>
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<tr>
<td>RD181247100</td>
<td>Anti-Human Heart Fatty Acid Binding Protein</td>
<td>Rabbit Polyclonal Antibody</td>
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<td>RD184247100</td>
<td>Anti-Human Heart Fatty Acid Binding Protein</td>
<td>Sheep Polyclonal Antibody</td>
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<tr>
<td>RD181473100</td>
<td>Anti-Human PCSK9</td>
<td>Rabbit Polyclonal Antibody</td>
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<tr>
<td>RD184473100</td>
<td>Anti-Human PCSK9</td>
<td>Sheep Polyclonal Antibody</td>
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<tr>
<td>RD181006100</td>
<td>Anti-Human Procalcitonin</td>
<td>Rabbit Polyclonal Antibody</td>
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<tr>
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<td>Anti-Human Procalcitonin</td>
<td>Sheep Polyclonal Antibody</td>
<td>0.1 mg</td>
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</tbody>
</table>

**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**

- **RD191473200R** PCSK9 Human ELISA
- **RD172473100** Proprotein Convertase Subtilisin/Kexin Type 9 Human HEK293