

BioVendor new products

January, 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:

MEDLAB 2019 (4 \ 2 \ 2019 - 7 \ 2 \ 2019 - Dubai)

miRNA

NEW miREIA KITS

CAT. NO.	STATUS	NAME	ASSAY FORMAT
RDM0007H	New	hsa-miR-15a-5p miREIA	miREIA - miRNA enzyme immunoassay
RDM0025H	New	hsa-miR-136-5p miREIA	miREIA - miRNA enzyme immunoassay
RDM0021H	New	hsa-miR-146a-3p miREIA	miREIA - miRNA enzyme immunoassay

miREIA - miRNA Enzyme Immunoassay

» FEATURED PRODUCT: HSA-MIR-136-5P MIREIA

miR-136-5p may play different roles in various types of **human cancer**.

It has been found that miR-136-5p acts as a **tumor suppressor** and its **deficiency induces chemoresistance in ovarian cancer**. Another study showed that miR-136-5p might act as a **negative regulator in colon cancer progression**. Expression of miR-136-5p in **osteosarcoma** tissues and cell lines was dramatically decreased compared with corresponding noncancerous tissues and cell lines, respectively. In **hepatocellular carcinoma**, downregulation of miR-136-5p may be responsible for carcinogenesis and aggressiveness of the disease.

In contrast, miR-136-5p acts as an **oncogene** in **non-small cell lung cancer** and is **upregulated** in **lung cancer** tissues and cell lines compared to their noncancerous counterparts. Expression of miR-136-5p was also shown to be aberrantly upregulated in gastric cancer tissues and cell lines and suppression of miR-136-5p inhibited proliferation and invasion in gastric cancer cell lines.

Decreased plasma miR-136 levels were measured in **knee osteoarthritis** patients when compared to healthy controls. Significantly **higher expression** levels of miR-136-5p in exosomes were observed in patients with **preeclampsia** compared to normal pregnancies.

To learn more about this assay and/or other BioVendor miREIA kits, please visit www.biovendor.com/mirna.

microRNAs (miRNAs) are 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 combination of immunoassay and molecular biology principles. Its main advantage is the **quantitative determination of miRNA** concentrations.

See more about [hsa-miR-136-5p miREIA](#)



NEW IMMUNOASSAYS

CAT. NO.		NAME	IVD/RUO	ASSAY FORMAT
RD191058200R	Human	Endocan ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
RD191390200R	Human	Placental Growth Factor ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
RIG025R	Human	WISP-1 ELISA	RUO	Sandwich ELISA

» FEATURED PRODUCT: HUMAN PLACENTAL GROWTH FACTOR ELISA

sFlt-1/PIGF ratio - a tool for prediction and diagnosis of preeclampsia!

Placental Growth Factor (PIGF) and soluble Fms-like tyrosine kinase 1 (sFlt-1) are angiogenic factors that were reported to play an important role in **pathogenesis of preeclampsia**. Maternal serum levels of PIGF and sFlt-1 are altered even before the onset of the disease.

Recently, in a **multicenter, prospective study – PROGNOSIS** (Prediction of short-term outcome in pregnant women with suspected preeclampsia) the **sFlt-1/PIGF** ratio proved to be a helpful tool in

- enabling clinicians to **exclude preeclampsia** for 1 week with very high confidence,
- reassuring women suspected of having the disease that it is safe to go home,
- screening models including PIGF as one of the components enabling early-onset preeclampsia prediction.

PIGF expression is a part of the **angiogenic switch that supports tumor vascularization**. In **most cancers** such as renal cell carcinoma, colorectal, lung, gastric, breast and hepatocellular cancers, a **positive correlation between cancer severity and PIGF** mRNA expression and protein blood levels was observed, with an inverse relationship between PIGF and survival.

Angiogenesis also plays a key role in atherogenesis and many studies indicate that PIGF might be a biomarker for **atherosclerosis**, particularly plaque instability, **myocardial ischemia**, and for **prognosis of the patients with cardiovascular disease**. Accelerated atherosclerosis is one of the consequential complications of chronic kidney disease and hemodialysis and PIGF levels in serum and urine have been described to be increased in these patients with **decreased renal function**.

- Validated for human serum, plasma (EDTA, citrate, heparin), urine, cerebrospinal fluid (CSF) and amniotic fluid
- Excellent sensitivity (LOD 0.8 pg/ml)
- Complementary Human sVEGF-R1/FLT-1 ELISA is also available from BioVendor

RELATED PRODUCTS

[RAF121R](#) sVEGF-R1/FLT-1 Human ELISA

See more about [Placental Growth Factor Human ELISA](#)

PROTEINS

NEW PROTEINS

CAT. NO.		NAME	SIZE	SOURCE
RD162034025	Human	Clusterin NATIVE	0.025 mg	Human serum
RD176034100	Human	Clusterin, Tag free	0.1 mg	HEK293
RD272009025	Mouse	Cystatin C	0.025 mg	<i>E. coli</i>

» FEATURED PRODUCT: MOUSE CYSTATIN C, *E. COLI*

Cystatin C is a non-glycosylated basic single-chain protein consisting of 120 amino acids with a molecular weight of 13.36 kDa and is characterized by two disulfide bonds in the carboxy-terminal region. It is encoded by the CST3 gene.

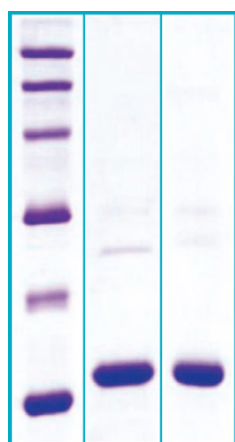
It belongs to the cystatin superfamily which inactivates lysosomal cysteine proteinases, e.g. cathepsin B, H, K, L and S.

Cystatin C is mainly used as a **biomarker of kidney function**. Serum Cystatin C seems to be better marker of glomerular filtration rate than creatinine. On the other hand, low concentration of Cystatin C represents a risk factor for **secondary cardiovascular events**. Its increased level has been found in patients with **autoimmune diseases**, with **colorectal tumors** and in patients on **dialysis**.

Imbalance between Cystatin C and cysteine proteinases is associated with **inflammation, renal failure, cancer, Alzheimer's disease, multiple sclerosis** and **hereditary Cystatin C amyloid angiopathy**.

These severe diseases are extensively studied using **experimental mouse models**. BioVendor Recombinant Mouse Cystatin C protein is suitable for such studies.

BioVendor Mouse Cystatin C is a recombinant protein expressed in *E. coli*. The Mouse Cystatin C consists of 134 AA. MW: 15 kDa (calculated). UniProtKB acc.no. P21460. N-terminal His-tag (14 extra AA). Endotoxin < 1.0 EU/μg. Protein identity was confirmed by LC-MS/MS.



12% SDS-PAGE separation of Mouse Cystatin C:

1. M.W. marker – 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 5 μg/lane
3. non-reduced and non-heated sample, 5 μg/lane

See more about [Cystatin C Mouse *E. coli*](#)

RELATED PRODUCTS

[RD491009100R](#) Cystatin C Canine ELISA

[RD191009100](#) Cystatin C Human ELISA

[RD291009200R](#) Cystatin C Mouse ELISA

[RD391009200R](#) Cystatin C Rat ELISA

[RD472009100](#) Cystatin C Canine *E. coli*

[RD172009100-H](#) Cystatin C Human *E. coli*

[RD172009100](#) Cystatin C Human NATIVE, Human Urine

[RD372009100](#) Cystatin C Rat *E. coli*

[RD181009100](#) Cystatin C (*E. coli*) Human, Rabbit Polyclonal Antibody

[RD184009100](#) Cystatin C (*E. coli*) Human, Sheep Polyclonal Antibody

[RD481009100](#) Cystatin C Canine, Rabbit Polyclonal Antibody

[RD484009100](#) Cystatin C Canine, Sheep Polyclonal Antibody

[RD181009220-01](#) Cystatin C Human, Rabbit Polyclonal Antibody

[RD181009220](#) Cystatin C Human, Rabbit Polyclonal Antibody

[RD184009220](#) Cystatin C Human, Sheep Polyclonal Antibody

[RD281009100](#) Cystatin C Mouse, Rabbit Polyclonal Antibody

[RD284009100](#) Cystatin C Mouse, Sheep Polyclonal Antibody

[RD384009100](#) Cystatin C Rat, Sheep Polyclonal Antibody

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