BioVendor new products

February, 2020:

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 2020:

 $\label{eq:medlab} \begin{array}{l} \mbox{Medlab Middle East 2020 } (3 \ \ 2 \ \ - \ 6 \ \ 2 \ \ 2020 \ - \ Dubai) \\ \mbox{ORS 2020 Annual Meeting } (8 \ \ 2 \ \ - \ 10 \ \ 2 \ \ 2020 \ - \ Phoenix) \\ \end{array}$

miRNA

NEW miREIA KITS

CAT. NO.	NAME	ASSAY FORMAT
RDM0034H	hsa-miR-29a-3p miREIA	miREIA – miRNA enzyme immunoassay
RDM0037H	hsa-miR-137-3p miREIA	miREIA – miRNA enzyme immunoassay
RDM0038H	hsa-piR-5937 miREIA	miREIA – miRNA enzyme immunoassay

miREIA - miRNA Enzyme Immunoassay

FEATURED PRODUCT: hsa-piR-5937 miREIA

piR-5937 - a member of a patented panel for colorectal cancer diagnosis and disease staging.

PIWI-Interacting RNAs (piRNAs) are **small non-coding RNA** molecules (distinct from microRNA) of approximately 24–32 nucleotides in length that often bind to members of the PIWI protein family to play regulatory roles.

- · expressed in a tissue-specific manner in a variety of human tissues
- · modulate key signaling pathways at the transcriptional or post-transcriptional level
- · participate in the epigenetic regulation of cancer and other diseases
- $\cdot\,$ play an important role in tumor formation, proliferation, and migration of cells
- piRNA and PIWI proteins, which are abnormally expressed in various cancers, may serve as **novel promising biomarkers** and therapeutic targets for tumor diagnostics and treatment

Based on the levels of **piR-5937** and piR-28876, it was possible to differentiate between colon **cancer patients** and healthy donors with high sensitivity and specificity. Moreover, both piRNAs also exhibited satisfactory diagnostic performance in patients with stage I disease and enabled the detection of **colon cancer** with higher sensitivity than currently used biomarkers CEA and CA19-9.

See more about hsa-piR-5937 miREIA

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





TWO-TAILED RT-qPCR

A new technology in BioVendor microRNA Solution portfolio

The patented Two-Tailed RT-qPCR method uses a two-hemiprobe approach to achieve highly accurate quantification of the challenging short miRNA sequences. While each hemiprobe alone is too short to bind the microRNA, when both are complementary they bind cooperatively. The hemiprobes are connected by a folded tether and bind to different stretches of the target miRNA.

- · A highly specific, sensitive and cost-effective system
- · Detect down to as few as ten target miRNA molecules
- · Improved discrimination between similar miRNAs

Two-tailed RT-qPCR assays are designed for microRNA targets specified by the client.

To make miRNA measurements available to any researcher, BioVendor offers a service providing microRNA determination performed by experts in a specialized laboratory.

Covered by patent No.: PTC/US15/45966

For more information see: www.biovendor.com/two-tailed-qpcr



NEW IMMUNOASSAYS

CAT. NO.		NAME	IVD/RU0	ASSAY FORMAT
<u>R3ZGI/96R</u>	Human	3 Screen Islet Cell Autoantibody ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
EA203/96		SDMA vet ELISA	RUO	Competitive ELISA, Immobilized antigen

>> FEATURED PRODUCT: SDMA vet ELISA

Symmetric dimethylarginine (SDMA) is an **early biomarker specific for kidney function**, not affected by inflammatory status, CVD, liver disease nor muscle mass.

It is **more sensitive than creatinine** and correlates well with the glomerular filtration rate (GFR). In chronic kidney disease (CKD), SDMA increases with 30 to 40% loss of kidney function while creatinine does not increase until 75% of kidney function is lost. According to many published studies, 10% of dogs and 30% of cats suffer from CKD during their life. In veterinary practice, the SDMA vet test will enable diagnosis of **CKD at a much earlier stage than cystatin C or creatinine**.

RELATED PRODUCTS

EA214/96 SDMA ELISA

NEW PROTEINS

CAT. NO.		NAME	SIZE	SOURCE
RD172581100	Human	Fibroblast Growth Factor 2	0.1 mg	E. coli
RP1792690001		Lysostaphin	1 mg	E. coli
RP1792690005		Lysostaphin	5 mg	E. coli
RP1792690010		Lysostaphin	10 mg	E. coli
RD272595100	Mouse	Stanniocalcin 1	0.1 mg	HEK293

>> FEATURED PRODUCT: STANNIOCALCIN 1 MOUSE E.coli

Stanniocalcin 1 (STC1) may play an **autocrine** and **paracrine** role with **pleiotropic effects in mammals**. It is expressed in a wide variety of tissues but unexpectedly is not detected in the circulation under normal circumstances. STC-1 can affect **calcium homeostasis, bone and muscle mass and structure**, and **angiogenesis** through effects on osteoblasts, osteoclasts, myoblasts/myocytes, and endothelial cells in the mouse model. STC1 regulates calcium currents in **cardiomyocytes** and may contribute to the alterations in calcium homeostasis of the **failing heart**. STC1 was identified as one of the hypoxia-responsive genes coupled to hypoxia-driven angiogenesis. Current research indicates that STC-1 might be a useful **molecular marker** to detect tumor cells in blood and bone marrow from patients with **various types of malignancies**.

BioVendor **Mouse Stanniocalcin 1** is a recombinant protein expressed in HEK293 cells. Total 235 AA. MW 26.6 kDa (calculated). UniProtKB acc. No. 055183 (His19-Ala247). C-terminal His-tag (6 extra AA). Protein identity confirmed by LC-MS/MS. Endotoxin < 0.1 EU/µg. Formulation: Filtered (0.4 µm) and lyophilized from 0.5 mg/ml solution in 20 mM Tris buffer, 50 mM NaCl, pH 7.5.



12% SDS-PAGE separation of Human Stanniocalcin-1

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

See more about STANNIOCALCIN 1 MOUSE E.coli

RELATED PRODUCTS

<u>RD191095200R</u> Stanniocalcin 1 Human ELISA <u>RD172095100</u> Stanniocalcin 1 Human HEK293 <u>RD181095100</u> Stanniocalcin 1 Human, Rabbit Polyclonal Antibody

NEW ANTIBODIES

CAT. NO.		PRODUCT	REACTIVE SP.	SIZE
RD181035100	Anti-Human	Connective Tissue Growth Factor	Rabbit Polyclonal Antibody	0.1 mg
RD184035100	Anti-Human	Connective Tissue Growth Factor	Sheep Polyclonal Antibody	0.1 mg
RD184041100	Anti-Human	Insulin Receptor	Sheep Polyclonal Antibody	0.1 mg
RD184188100	Anti-Human	Mammaglobin A	Sheep Polyclonal Antibody	0.1 mg
RD181276100	Anti-Human	Neudesin	Rabbit Polyclonal Antibody	0.1 mg
RD184276100	Anti-Human	Neudesin	Sheep Polyclonal Antibody	0.1 mg
RD181326100	Anti-Human	Neuroserpin	Rabbit Polyclonal Antibody	0.1 mg
RD184326100	Anti-Human	Neuroserpin	Sheep Polyclonal Antibody	0.1 mg
RD184485100	Anti-Human	NT-proANP	Sheep Polyclonal Antibody	0.1 mg
RD184223100	Anti-Human	S100A14	Sheep Polyclonal Antibody	0.1 mg

FEATURED PRODUCTS: ANTI HUMAN MAMMAGLOBIN A SHEEP POLYCLONAL ANTIBODY

Mammaglobin A (MGB1) is a secretory protein, a member of the uteroglobin gene family. It is a small protein (approximately 10 kDa) containing an alpha-helix in the structure and is often forming dimers. MGB1 **overexpression is only limited to cells from most breast cancers** and may be used to **detect circulating or disseminated tumor cells**. It has been published that plasma mammaglobin A expression was a predictor of **poor prognosis for breast carcinoma patients**, significantly associated with lymph node metastasis and advanced tumor stage. However, they were not associated with menopausal status, EGFR2 status, and tumor size.

The polyclonal antibody has been obtained from sheep immunized with a recombinant Human Mammaglobin A produced in HE293 cells. The PAbs have been immunoaffinity-purified using the immunization antigen. The antibody was validated for application in ELISA.

Applications: ELISA

See more about Anti-Human Mammaglobin A, Sheep Polyclonal Antibody

RELATED PRODUCTS

RD172188100-HEK Mammaglobin A (Fc Chimera) Human HEK293



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