

BioVendor new products

April 19, 2016

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 2016:

2nd Symposium Tumor Metabolism meets Immunology (28 \ 04 \ 2016 - 30 \ 04 \ 2016 - Regensburg)

Analytica 2016 (10 \ 05 \ 2016 - 13 \ 05 \ 2016 - Munich)

AAI 2016 (13 \ 05 \ 2016 - 17 \ 05 \ 2016 - Seattle)

D.A.CH-Tag der DGE, ÖGES und SGED (16 \ 05 \ 2016 - 28 \ 05 \ 2016 - Munich)

BIO International Convention (06 \ 06 \ 2016 - 09 \ 06 \ 2016 - San Francisco)

19th Meeting on T-Cells – Subsets and functions (27 \ 06 \ 2016 - 28 \ 06 \ 2016 - Marburg)

46th Annual Meeting German Society of Immunology (DGfI) (27 \ 09 \ 2016 - 30 \ 09 \ 2016 - Hamburg)

6. Jahrestagung der ÖGLMKC (08 \ 11 \ 2016 - 11 \ 11 \ 2016 - Salzburg)

20th Joint-Meeting “Signal Transduction: Receptors, Mediators and Genes” (09 \ 11 \ 2016 - 11 \ 11 \ 2016 - Weimar)

MEDICA 2016 (14 \ 11 \ 2016 - 17 \ 11 \ 2016 - Dusseldorf)

8th Nachwuchswissenschaftler-Meeting – Biochemische Pharmakologie und Toxikologie (GBM) (02 \ 12 \ 2016 - 03 \ 12 \ 2016 - Günzburg)

IMMUNOASSAYS

» FEATURED PRODUCT: HUMAN AMINOACYLASE-1 ELISA

Aminoacylase-1 (ACY-1) is a potential biomarker of **long-term outcome after kidney transplantation**. Serum ACY-1 concentration was **high** in patients with **tubular cell damage**. ACY-1 expression is also significantly **correlated** with serum alpha fetoprotein level and **tumor invasiveness**.

- Validated for human serum, plasma (heparin, citrate) and urine samples
- High sensitivity (LOD 0.14 ng/ml)
- Short assay protocol
- All test procedures are performed at room temperature

Aminoacylase-1 catalyzes the hydrolysis of N-acetylated amino acids into the free amino acid and acetic acid. ACY-1 plays a general role in the cytosolic breakdown of acetylated amino acids generated during intracellular protein degradation.

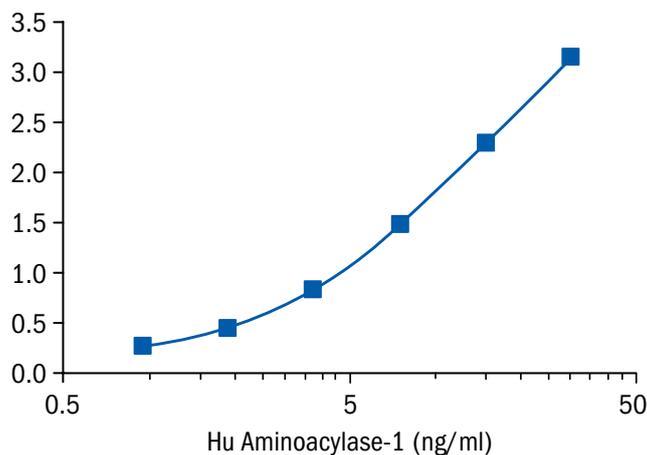
In **kidney transplantation**, serum ACY-1 levels were increased significantly in the majority of patients with delayed graft function (DGF), but rose in only a minority of patients with immediate function. This showed the potential clinical utility of serum ACY-1 levels immediately post kidney transplantation, enabling

subdivision of patients with delayed graft function in terms of long-term

outcome. Serum ACY-1 concentration was high in patients with **tubular cell damage** due to ischemia-reperfusion injury (IRI) and/ or acute tubular necrosis.

ACY-1 also interacts with sphingosine kinase type 1, which is involved in promoting cell growth and inhibiting apoptosis of tumor cells. ACY-1 plays a role in **regulating responses** of the cell to **oxidative stress**. ACY-1 serves as a putative **suppressor** in renal cell **carcinoma**, hepatocellular carcinoma and small cell lung cancer.

An enzymatic deficiency in ACY-1 may result in **defects in brain metabolism and function**, such as encephalopathy, unspecific psychomotor delay, psychomotor delay with atrophy of the vermis and syringomyelia, marked muscular hypotonia or normal clinical features (e.g. fever). **Epileptic seizures** are a frequent feature in these patients. ACY-1 **deficiency** has also been described as an **inborn error of metabolism** identified in children who have increased urinary excretion of N-acetyl amino acids.



RELATED PRODUCTS

[RD172406100](#) Aminoacylase-1 Human *E. coli*

NEW IMMUNOASSAYS

CAT. NO.		NAME		IVD/RUO	ASSAY FORMAT
REA212/96R		ADMA Fast	ELISA	IVD CE	Competitive ELISA, Immobilized antigen
RTC020R		Alpha-Amylase saliva	ELISA	RUO	
RD192406200R	Human	Aminoacylase-1	ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
RD120009	Human	Cystatin C	PENTASET	RUO	ELISA development kit
RD191369200R	Human	Epididymis Protein 4 (HE4)	ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
RD191268200R	Human	Gastrokine-1	ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
RD491488200R	Canine	Procalcitonin	ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
RTC021R		Secretory IgA	ELISA	RUO	Sandwich ELISA, 2nd HRP-labelled antibody
RD191095200R	Human	Stanniocalcin 1	ELISA	RUO	Sandwich ELISA, Biotin-labelled antibody
RGD001R		TM-CYFRA 21-1	ELISA	RUO	Sandwich ELISA

RECOMBINANT PROTEINS

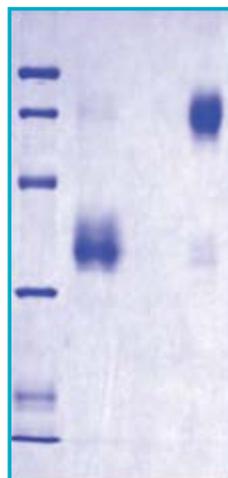
» FEATURED PRODUCT: HUMAN OXIDIZED LOW-DENSITY LIPOPROTEIN RECEPTOR 1 HEK293

Oxidized low-density lipoprotein receptor 1 (LOX1) belongs to the C-type lectin superfamily. The gene is regulated through the cyclic AMP signaling pathway. **Mutations** of this gene have been associated with **atherosclerosis**, risk of **myocardial infarction**, and may modify the risk of **Alzheimer's disease**. Alternate splicing results in multiple transcript variants.

LOX-1 as a **scavenger receptor binds, internalizes and degrades oxidized low-density lipoprotein**. This protein may also be involved in the regulation of Fas-induced apoptosis. LOX-1 is a homodimer with a reactive backbone that can bind to a host of different ligands, including small molecules, and whole cells. **LOX-1 is involved in many intercellular, intracellular, and molecular processes that are atherogenic**. LOX-1 levels are elevated within atherosclerotic plaques and its expression is induced by proinflammatory cytokines. It is a likely **vascular disease biomarker** as well as an ideal **choice for drug therapy aimed at preventing cardiovascular disease**.

BioVendor produces the recombinant Human Oxidized low-density lipoprotein receptor 1 in *HEK293* cell line. The monomer of the protein contains 221 AA. MW: 25.3 kDa (calculated). Endotoxin-free. UniProtKB acc. No. P78380 (Ser61-Gln273). N-terminal flag-tag

Oxidized low-density lipoprotein receptor 1 Human HEK293



12 % SDS-PAGE separation of Human sLOX1 (Flag tag):

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

NEW RECOMBINANT PROTEINS

CAT. NO.		NAME	SIZE	SOURCE
RD172475100	Human	mu-Crystallin	0.1 mg	<i>E. coli</i>
RENT001010	Human	Stable Fibroblast Growth Factor 2	0.01 mg	<i>E. coli</i>
RENT001050	Human	Stable Fibroblast Growth Factor 2	0.05 mg	<i>E. coli</i>
RENT0011000	Human	Stable Fibroblast Growth Factor 2	1 mg	<i>E. coli</i>
RD172470100	Human	Myosin-binding protein C cardiac-type	0.1 mg	<i>E. coli</i>
RD172143100	Human	Oxidized low-density lipoprotein receptor 1	0.1 mg	HEK293
RD172490100	Human	Profilin-1	0.1 mg	<i>E. coli</i>

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