Rat visfatin ELISA Kit

Product Code	CSB-E08941r
Protein Biological Process 2	Alkaloid biosynthesis and metabolism
Abbreviation	NAMPT
Protein Biological Process 1	Biosynthesis/Metabolism
Target Name	nicotinamide phosphoribosyltransferase
Uniprot No.	Q80Z29
Alias	1110035O14Rik, DKFZp666B131, MGC117256, PBEF, PBEF1, VF, VISFATIN, NAmPRTase|pre-B cell-enhancing factor|pre-B-cell colony enhancing factor 1
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Pyridine nucleotide biosynthesis
Sample Types	serum, plasma, tissue homogenates
Detection Range	3.12 ng/mL-200 ng/mL
Sensitivity	0.78 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Metabolism
Gene Names	Nampt
Tag Info	quantitative
Protein Description	Sandwich
Description	This rat visfatin ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of rat visfatin in different samples, including serum, plasma, or tissue homogenates. The enzyme-substrate chromogenic reaction is also used to amplify the signal and quantify the levels of the analyte through the intensity of the colored product. The color intensity positively correlates with the amount of visfatin bound in the initial step. Visfatin (NAMPT) is an adipocytokine that exerts many functions including enhancement of cell proliferation, biosynthesis of nicotinamide mono- and

dinucleotide, and hypoglycaemic effect through an endocrine, autocrine, and paracrine manner. Visfatin binds to the insulin receptor at a site different from that of insulin, leading to hypoglycemia by reducing glucose release from liver cells and stimulating glucose utilization in adipocytes and myocytes. Visfatin is upregulated by hypoxia, inflammation, and hyperglycemia but downregulated by insulin, somatostatin, and statins. It is involved in many pathological processes, including obesity, diabetes, and cardiovascular diseases.

Target Details

This gene encodes a protein that catalyzes the condensation of nicotinamide with 5-phosphoribosyl-1-pyrophosphate to yield nicotinamide mononucleotide, one step in the biosynthesis of nicotinamide adenine dinucleotide. The protein is an adipokine that is localized to the bloodstream and has various functions, including the promotion of vascular smooth muscle cell maturation and inhibition of neutrophil apoptosis. It also activates insulin receptor and has insulin-mimetic effects, lowering blood glucose and improving insulin sensitivity. The protein is highly expressed in visceral fat and serum levels of the protein correlate with obesity. This gene has a pseudogene on chromosome 10.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%
Three samples of known concentration were tested twenty times on one plate to assess.
Inter-assay Precision (Precision between assays): CV%<10%
Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat visfatin in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	87
	Range %	82-97
1:2	Average %	96
	Range %	92-103
1:4	Average %	102
	Range %	96-108
1:8	Average %	94
	Range %	89-98

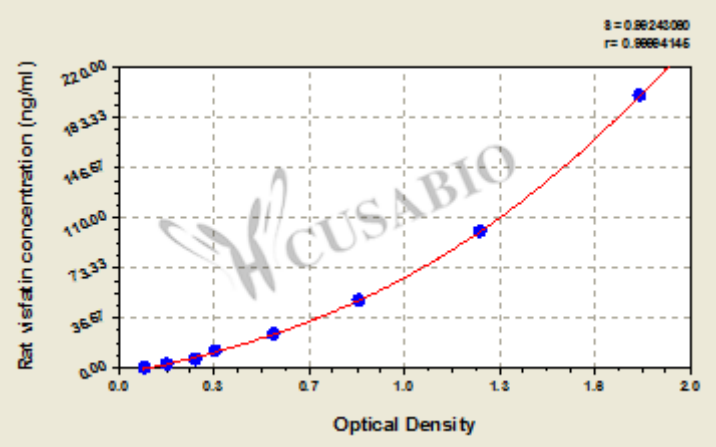
Recovery

The recovery of rat visfatin spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	95	90-100
EDTA plasma (n=4)	98	94-108

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
200	1.743	1.867	1.805	1.707
100	1.304	1.199	1.252	1.154
50	0.835	0.838	0.837	0.739
25	0.534	0.547	0.541	0.443
12.5	0.348	0.336	0.342	0.244
6.25	0.277	0.268	0.273	0.175
3.12	0.171	0.177	0.174	0.076
0	0.098	0.097	0.098	?

Msds

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