



Rat dipeptidyl peptidase 4, DPP4 ELISA Kit

Product Code	CSB-E08519r
Abbreviation	DPP4
Protein Biological Process 1	Cell Adhesion
Uniprot No.	P14740
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.78 ng/mL - 50 ng/mL
Sensitivity	0.195 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	Immunology
Gene Names	Dpp4
Tag Info	quantitative
Protein Description	Sandwich

Description

This rat DPP4 ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of rat DPP4 in multiple samples, including serum, plasma, or tissue homogenates. It also uses the enzyme-substrate chromogenic reaction to visualize and analyze the analyte levels through the color intensity. The intensity of the colored product is in direct proportion to the DPP4 levels in the sample and is measured at 450 nm through a microplate reader.

DPP4, also called CD26, is a serine protease that is widely distributed in various organs and cells. Through regulating energy metabolism, inflammation, and immune function, DPP4 is involved in various physiological and pathological processes such as inflammation, energy metabolism, immune regulation, cell adhesion, and apoptosis. During the COVID-19 global pandemic, DPP4 was found to be an important marker that may play a significant role in disease progression. DPP4 is also a surface marker expressed in senescent cells. DPP4 has also been demonstrated to be associated with CD8⁺ T cell co-stimulation, B cell activation, macrophage polarization, and NK cell proliferation, playing an emerging role in modulating immune functions. Regarding its role in the immune



system, DPP4 was shown to participate in the pathogenesis of autoimmune diseases like rheumatoid arthritis, inflammatory bowel disease as well as graft-versus-host disease (GVHD).

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 DPP? 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 %	94
	Range %	91-97
1:2	Average %	86
	Range %	83-90
1:4	Average %	101
	Range %	97-105
1:8	Average %	88
	Range %	85-93

Recovery

The recovery of rat DPP? 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)	106	103-109
EDTA plasma (n=4)	95	91-99

Msds

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