



Rat low density lipoprotein receptor,LDLR ELISA Kit

Product Code	CSB-E13545r
Protein Biological Process 2	Lipogenesis and lipometabolism
Abbreviation	LDLR
Protein Biological Process 1	Biosynthesis/Metabolism
Target Name	low density lipoprotein receptor
Uniprot No.	P35952
Alias	FH, FHC, LDLCQ2, LDL receptor low-density lipoprotein receptor class A domain-containing protein 3
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Cholesterol metabolism
Sample Types	serum, plasma, tissue homogenates
Detection Range	7.8 pg/mL-500 pg/mL
Sensitivity	1.95 pg/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	Cardiovascular
Gene Names	Ldlr
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat LDLR ELISA Kit was designed for the quantitative measurement of Rat LDLR protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 7.8 pg/mL-500 pg/mL and the sensitivity is 1.95 pg/mL.
Target Details	The low density lipoprotein receptor (LDLR) gene family consists of cell surface proteins involved in receptor-mediated endocytosis of specific ligands. Low density lipoprotein (LDL) is normally bound at the cell membrane and taken into



the cell ending up in lysosomes where the protein is degraded and the cholesterol is made available for repression of microsomal enzyme 3-hydroxy-3-methylglutaryl coenzyme A (HMG CoA) reductase, the rate-limiting step in cholesterol synthesis. At the same time, a reciprocal stimulation of cholesterol ester synthesis takes place. Mutations in this gene cause the autosomal dominant disorder, familial hypercholesterolemia.

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 LDLR 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)
1:200	Average %	85
	Range %	80-89
1:400	Average %	102
	Range %	98-108
1:800	Average %	90
	Range %	85-94
1:1600	Average %	97
	Range %	92-101

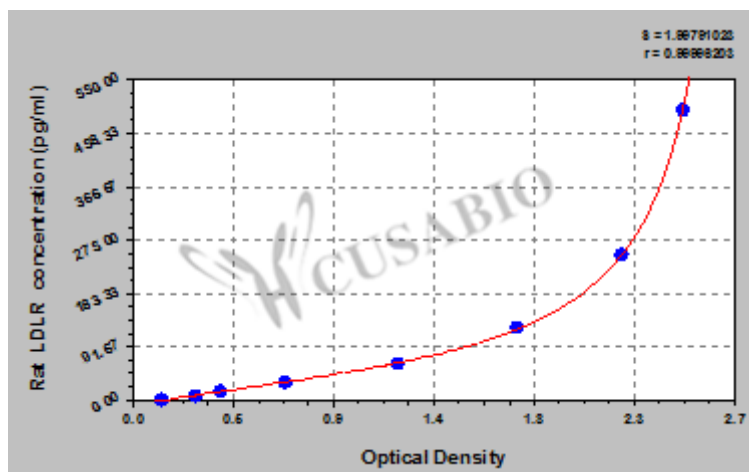
Recovery

The recovery of rat LDLR 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)	88	84-92
EDTA plasma (n=4)	93	89-100

Typical

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



pg/ml	OD1	OD2	Average	Corrected
500	2.512	2.475	2.494	2.355
250	2.247	2.196	2.222	2.083
125	1.803	1.689	1.746	1.607
62.5	1.189	1.227	1.208	1.069
31.2	0.687	0.713	0.700	0.561
15.6	0.415	0.392	0.404	0.265
7.8	0.298	0.289	0.294	0.155
0	0.136	0.141	0.139	?

Msds

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