Mouse Endothelin 1,ET-1 ELISA Kit

Product Code	CSB-E05145m
Abbreviation	EDN1
Target Name	endothelin 1
Uniprot No.	P22387
Alias	ET1, HDLCQ7, preproendothelin 1
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, cell culture supernates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 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	Cancer
Gene Names	Edn1
Tag Info	quantitative
Protein Description	Sandwich

Description

CUSABIO's Endothelin-1 (ET-1) mouse ELISA kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of mouse ET-1 in serum, plasma, or cell culture supernates. This assay uses an antibody specific for mouse ET-1 coated on a 96-well plate. ET-1 present in a sample is bound to the wells by the immobilized antibody after adding the sample into the wells. Biotinylated ET-1 antibody is added to the wells, forming an antibody-analyte-antibody complex. HRP-conjugated avidin is pipetted to the wells and binds to the complex. A TMB substrate solution is added to the wells and color develops in proportion to the amount of ET-1 bound. The addition of Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm using a microplate reader.

ET-1, also called EDN1, is a powerful endogenous vasoconstrictor and is mainly secreted by endothelial cells. In addition to the vasoconstrictive action, ET-1 also leads to fibrosis of the vascular cells and induces the generation of reactive oxygen species (ROS), especially superoxide anions, thus resulting in the development of oxidative stress. ET-1 also exerts a pro-inflammatory effect. It increases the expression of adhesion molecules on vascular endothelial cells

and stimulates the aggregation of polymorphonuclear neutrophils contributing to inflammation and endothelial dysfunction.

Target Details

This protein is proteolytically processed to release a secreted peptide termed endothelin 1. This peptide is a potent vasoconstrictor and is produced by vascular endothelial cells. Endothelin 1 also can affect the central nervous system. Two transcript variants encoding different isoforms have been found for this gene.

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 mouse ET-1 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 %	83-94
1:2	Average %	93
	Range %	89-98
1:4	Average %	94
	Range %	89-100
1:8	Average %	95
	Range %	88-99

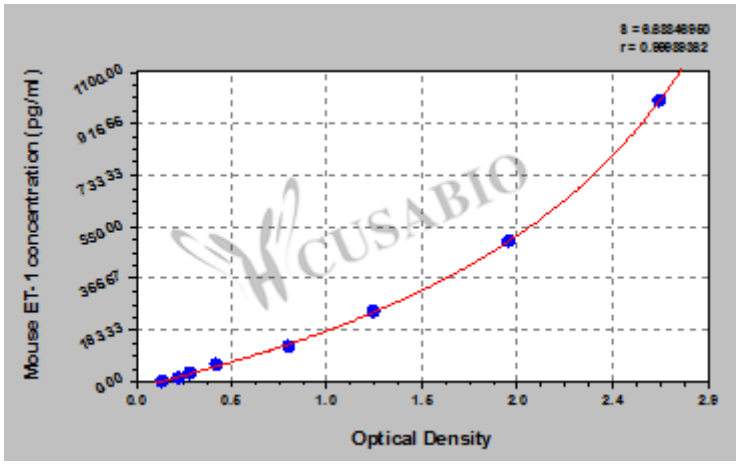
Recovery

The recovery of mouse ET-1 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)	96	92-102
EDTA plasma (n=4)	98	90-105

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
1000	2.729	2.612	2.671	2.524
500	1.938	1.876	1.907	1.760
250	1.228	1.204	1.216	1.069
125	0.816	0.759	0.788	0.641
62.5	0.435	0.407	0.421	0.274
31.2	0.299	0.275	0.287	0.140
15.6	0.241	0.223	0.232	0.085
0	0.151	0.143	0.147	?

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