



Rat cytochrome P450 2E1,CYP2E1 ELISA Kit

Product Code	CSB-E09782r
Abbreviation	CYP2E1
Target Name	cytochrome P450, family 2, subfamily E, polypeptide 1
Uniprot No.	P05182
Alias	CPE1, CYP2E, P450-J, P450C2E, cytochrome P450 2E1 cytochrome P450, subfamily IIE (ethanol-inducible), polypeptide 1 flavoprotein-linked monooxygenase microsomal monooxygenase xenobiotic monooxygenas
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 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	Cardiovascular
Gene Names	Cyp2e1
Tag Info	quantitative
Protein Description	Sandwich

Description

This Rat CYP2E1 ELISA Kit was designed for the quantitative measurement of Rat CYP2E1 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.156 ng/mL-10 ng/mL and the sensitivity is 0.039 ng/mL.

Target Details

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and is induced by ethanol, the diabetic state, and starvation. The enzyme metabolizes both endogenous substrates, such as ethanol, acetone, and acetal, as well as exogenous substrates including benzene, carbon tetrachloride, ethylene glycol, and nitrosamines which are premutagens found in cigarette smoke. Due to its many substrates, this enzyme may be involved in such varied processes as gluconeogenesis, hepatic cirrhosis, diabetes, and cancer.



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 CYP2E1 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 %	101
	Range %	94-105
1:2	Average %	97
	Range %	88-101
1:4	Average %	102
	Range %	91-107
1:8	Average %	104
	Range %	97-108

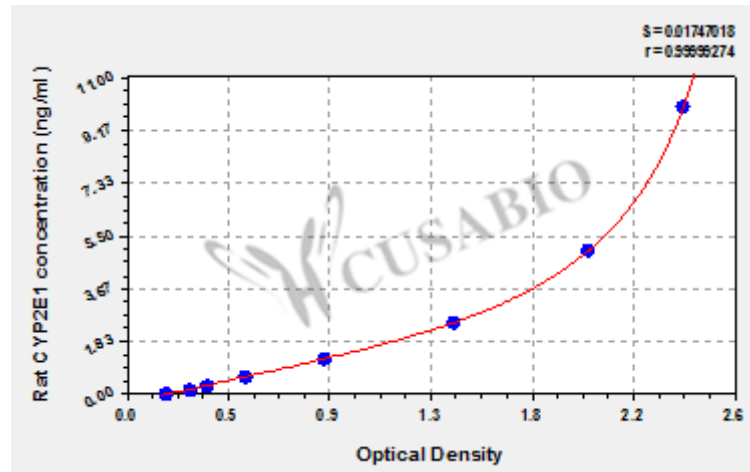
Recovery

The recovery of rat CYP2E1 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	88-99
EDTA plasma (n=4)	105	97-108

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
10	2.431	2.367	2.399	2.216
5	2.015	1.968	1.992	1.809
2.5	1.431	1.402	1.417	1.234
1.25	0.876	0.845	0.861	0.678
0.625	0.512	0.534	0.523	0.340
0.312	0.364	0.351	0.358	0.175
0.156	0.288	0.283	0.286	0.103
0	0.186	0.180	0.183	?

Msds

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