



Rat Cytochrome P450 19A1(CYP19A1) ELISA kit

Product Code	CSB-EL006394RA
Abbreviation	CYP19A1
Target Name	cytochrome P450, family 19, subfamily A, polypeptide 1
Uniprot No.	P22443
Alias	ARO, ARO1, CPV1, CYAR, CYP19, MGC104309, P-450AROM, OTTHUMP00000162543 aromatase cytochrome P450, subfamily XIX (aromatization of androgens) estrogen synthetase flavoprotein-linked monooxygenase mic
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	18.75 pg/mL-1200 pg/mL
Sensitivity	4.68 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	Metabolism
Gene Names	Cyp19a1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat CYP19A1 ELISA Kit was designed for the quantitative measurement of Rat CYP19A1 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 18.75 pg/mL-1200 pg/mL and the sensitivity is 4.68 pg/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 catalyzes the last steps of estrogen biosynthesis, three successive hydroxylations of the A ring of androgens. Mutations in this gene can result in either increased or decreased aromatase activity; the associated phenotypes suggest that estrogen functions both as a sex steroid hormone and in growth or differentiation. The gene expresses two transcript variants.



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 CYP19A1 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 %	95-107
1:2	Average %	91
	Range %	86-97
1:4	Average %	88
	Range %	84-92
1:8	Average %	95
	Range %	90-100

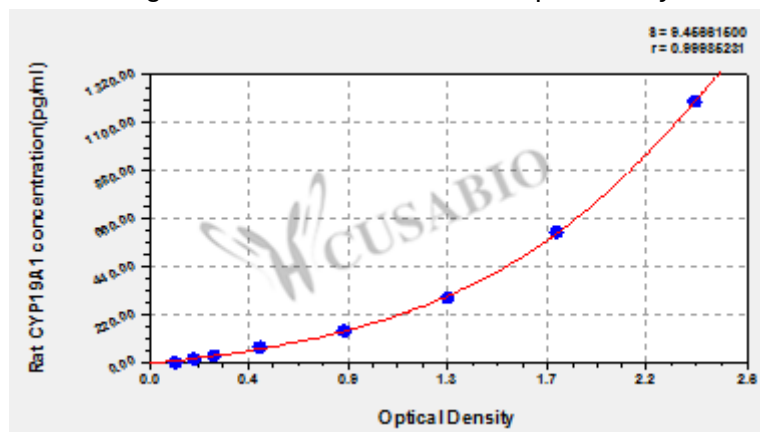
Recovery

The recovery of rat CYP19A1 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)	85	80-90
EDTA plasma (n=4)	96	91-103

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
1200	2.452	2.272	2.362	2.237
600	1.705	1.832	1.769	1.644
300	1.286	1.316	1.301	1.176
150	0.829	0.880	0.855	0.730
75	0.504	0.469	0.487	0.362
37.5	0.301	0.285	0.293	0.168
18.75	0.203	0.211	0.207	0.082
0	0.127	0.122	0.125	

**Msd**

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