



Human 1,25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial (CYP24A1) ELISA kit

Product Code	CSB-EL006401HU
Abbreviation	CYP24A1
Target Name	1,25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial (CYP24A1)?cytochrome P450, family 24, subfamily A, polypeptide 1
Uniprot No.	Q07973
Alias	CP24, CYP24, MGC126273, MGC126274, P450-CC24, 1,25-@dihydroxyvitamin D3 24-hydroxylase 24-OHase cytochrome P450 family 24 subfamily A polypeptide 1 cytochrome P450, subfamily XXIV (vitamin D 24-hydroxylase) exo-mitochondrial
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
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	Cancer
Gene Names	CYP24A1
Tag Info	quantitative
Protein Description	Sandwich

Description

This Human CYP24A1 ELISA Kit was designed for the quantitative measurement of Human CYP24A1 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

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 mitochondrial protein initiates the degradation of 1,25-dihydroxyvitamin D3, the physiologically active form of vitamin D3, by hydroxylation of the side chain. In regulating the level of vitamin D3, this enzyme



plays a role in calcium homeostasis and the vitamin D endocrine system. Alternatively spliced 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 human CYP24A1 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 %	92
	Range %	86-97
1:2	Average %	89
	Range %	83-94
1:4	Average %	97
	Range %	91-102
1:8	Average %	98
	Range %	92-103

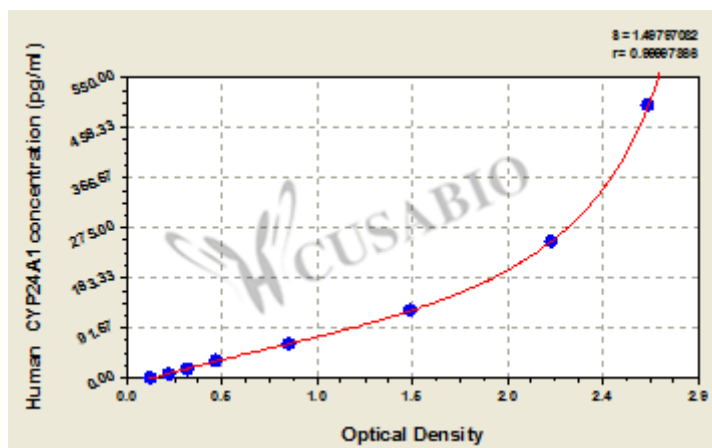
Recovery

The recovery of human CYP24A1 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)	94	88-99
EDTA plasma (n=4)	86	80-91

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	2.719	2.612	2.666	2.534
250	2.226	2.121	2.174	2.042
125	1.407	1.504	1.456	1.324
62.5	0.845	0.821	0.833	0.701
31.2	0.457	0.466	0.462	0.330
15.6	0.323	0.314	0.319	0.187
7.8	0.221	0.226	0.224	0.092
0	0.133	0.131	0.132	

Msds

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