Cytochrome P450 2b6 (CYP2B6) ELISA Kit for Human

PRODUCT OVERVIEW

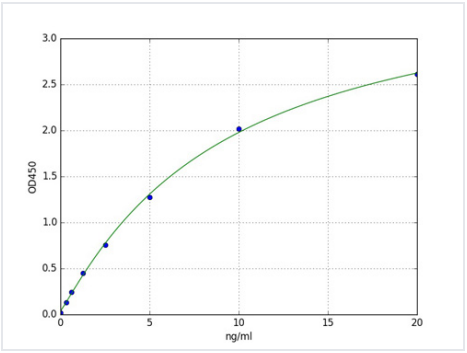
Product Name	Cytochrome P450 2B6 (CYP2B6), ELISA Kit
Full Product Name	Human Cytochrome P450 2B6 ELISA Kit
Product Gene Name	CYP2B6 elisa kit
Product Synonym Names	CYP2B6 (Cytochrome P450 2B6)/4-cineole 2-exo-monooxygenase/CYPIIB6/Cytochrome P450 IIB1
Species Reactivity	Human
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.313-20ng/ml
Sensitivity	0.188ng/ml
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Molecular Weight	33,385 Da
OMIM	123930
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for CYP2B6 elisa kit	Principle of the Assay||This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-CYP2B6 antibody was pre-coated onto 96-well plates. And the biotin conjugated anti- CYP2B6 antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the CYP2B6 amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of CYP2B6 can be calculated.
Other Notes	Small volumes of CYP2B6 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CYP2B6 purchase	MBS760090 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cytochrome P450 2B6 (CYP2B6) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CYP2B6. The ELISA analytical biochemical technique of the MBS760090 kit is based on CYP2B6 antibody-CYP2B6 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CYP2B6 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CYP2B6. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

Typical Data & Standard Curve

Results of a typical standard run of a CYP2B6 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	ng/ml	0	0.313	0.625	1.25	2.5	5	10	20
Y	OD450	0.013	0.125	0.236	0.443	0.825	1.428	1.865	2.285

Typical Testing Data of CYP2B6 elisa kit



Typical Standard Curve of CYP2B6 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CYP2B6. It may not necessarily be applicable to this product.

NCBI GI #	7949031
NCBI GeneID	1555
NCBI Accession #	NP_000758.1
UniProt Secondary Accession #	Q2V565; Q9UK46; B4DWP3
UniProt Related Accession #	P20813
GenBank Nucleotide #	NM_000767.4
NCBI Official Full Name	cytochrome P450 2B6
NCBI Official Synonym Full Names	cytochrome P450 family 2 subfamily B member 6
NCBI Official Symbol	CYP2B6
NCBI Official Synonym Symbols	CPB6; EFVM; IIB1; P450; CYP2B; CYP2B7; CYP2B7P; CYPIIB6
UniProt Protein Name	Cytochrome P450 2B6
UniProt Synonym Protein Names	1,4-cineole 2-exo-monooxygenase; CYPIIB6; Cytochrome P450 IIB1
Protein Family	Cytochrome
UniProt Gene Name	CYP2B6
UniProt Entry Name	CP2B6_HUMAN
NCBI Protein Information	cytochrome P450 2B6
NCBI Summary for CYP2B6	This gene, CYP2B6, 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 its expression is induced by phenobarbital. The enzyme is known to metabolize some xenobiotics, such as the anti-cancer drugs cyclophosphamide and ifosphamide. Transcript variants for this gene have been described; however, it has not been resolved whether these transcripts are in fact produced by this gene or by a closely related pseudogene, CYP2B7. Both the gene and the pseudogene are located in the middle of a CYP2A pseudogene found in a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q. [provided by RefSeq, Jul 2008]

UniProt Comments for CYP2B6	CYP2B6: cytochrome P450, subfamily IIB. Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Phosphorylation is accompanied by a decrease in enzyme activity. Protein type: Xenobiotic Metabolism - metabolism by cytochrome P450; Oxidoreductase; Cofactor and Vitamin Metabolism - retinol; Xenobiotic Metabolism - drug metabolism - cytochrome P450; Lipid Metabolism - arachidonic acid; EC 1.14.14.1 Chromosomal Location of Human Ortholog: 19q13.2 Cellular Component: endoplasmic reticulum membrane Molecular Function: arachidonic acid epoxygenase activity; heme binding; iron ion binding; monooxygenase activity; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen; steroid hydroxylase activity Biological Process: drug metabolic process; epoxygenase P450 pathway; exogenous drug catabolic process; ketone metabolic process; steroid metabolic process; xenobiotic metabolic process Disease: Efavirenz, Poor Metabolism Of
Research Articles on CYP2B6	**1.** An increase in minor allele frequencies for CYP2B6 (and CYP2D6)was found in Roma population samples.
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