Human CYP2C19/Cytochrome P450 2C19 ELISA Kit

E45K00800

Catalog Number:E45K00800

Species Reactivity: Human

Storage: Store at +4°C. Please refer to protocols.

Cite ID#:EN5521250

Type: Human ELISA Kits

Description: Human CYP2C19/Cytochrome P450 2C19 ELISA Kit is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit designed for the quantitative measurement of CYP2C19 in biological samples. Our rigorously validated, ready-to-go Human CYP2C19/Cytochrome P450 2C19 ELISA Kit use a simple protocol that easily integrates into your current processes, allowing you to rapidly and accurately detect CYP2C19 in your samples. Appropriate sample types may include Cell Culture Supernates, Serum, Platelet-poor EDTA Plasma, Platelet-poor Heparin Plasma, Urine. Precision Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested several times on one plate to assess intra-assay precision. Inter-Assay Precision (Precision between assays): Three samples of known concentration were tested in several separate assays to assess inter-assay precision. Assays were performed by at least two technicians using two lots of components.

Assay type: Sandwich

Detection principle: Spectrophotometrical

Sample type: This immunoassay kit allows for the in vitro quantitative determination in Serum, plasma, tissue homogenates, cell culture supernates and other biological fluids.

Sensitivity:0.082 ng/mL

Assay range:0.156-10 ng/mL

Kit components: Assay Plate, Standard, Sample Diluent, Assay Diluent A&B, Detection Reagent A&B, Wash Buffer, Substrate, Stop Solution.

Other reagents required: Deionized or distilled water

Gene Name:CYP2C19

Swiss-Prot No.:P33261

Function:A cytochrome P450 monooxygenase involved in the metabolism of polyunsaturated fatty acids (PUFA)

For Research Use Only

(PubMed:18577768, PubMed:19965576, PubMed:20972997). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase) (PubMed:18577768, PubMed:19965576, PubMed:20972997). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates PUFA specifically at the omega-1 position (PubMed:18577768). Catalyzes the epoxidation of double bonds of PUFA (PubMed:20972997, PubMed:19965576). Also metabolizes plant monoterpenes such as limonene. Oxygenates (R)- and (S)-limonene to produce carveol and perillyl alcohol (PubMed:11950794). Responsible for the metabolism of a number of therapeutic agents such as the anticonvulsant drug S-mephenytoin, omeprazole, proguanil, certain barbiturates, diazepam, propranolol, citalopram and imipramine. Hydroxylates fenbendazole at the 4' position (PubMed:23959307).

Form:ELISA Kits

Synonyms:(R)-limonene 6-monooxygenase,(S)-limonene 6-monooxygenase,(S)-limonene 7-monooxygenase,CYPIIC17,CYPIIC19,Cytochrome P450-11A,Cytochrome P450-254C,Fenbendazole monooxygenase (4'-hydroxylating),Mephenytoin 4-hydroxylase