

Mouse 25-hydroxyvitamin D-1 alpha hydroxylase, mitochondrial (CYP27B1) ELISA Kit

Catalog No: #EK11279

Orders: order@signalwayantibody.com

Package Size: #EK11279-1 48T #EK11279-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Mouse 25-hydroxyvitamin D-1 alpha hydroxylase, mitochondrial (CYP27B1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	CP2B; CYP1; CYP1alpha; CYP27B; P450c1; PDDR; VDD1; VDDR; VDDRI; VDR; 1alpha(OH)ase 25 hydroxyvitamin D3-1-alpha hydroxylase 25-Hydroxyvitamin D3 1alpha-hydroxylase 25-OHD-1 alpha-hydroxylase 25-hydr
Accession No.	O35084
Uniprot	O35084
GeneID	13115;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:0.625-40 ng/mL

Sensitivity:0.235 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate CYP27B1 in samples. An antibody specific for CYP27B1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyCYP27B1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for CYP27B1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of CYP27B1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:CYP27B1 isa 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. The protein encoded by this gene localizes to the inner mitochondrial membrane where it hydroxylates 25-hydroxyvitamin D3 at the 1alpha position.

This reaction synthesizes 1alpha,25-dihydroxyvitamin D3, the active form of vitamin D3, which binds to the vitamin D receptor and regulates calcium

metabolism. Thus this enzyme regulates the level of biologically active vitamin D and plays an important role in calcium homeostasis. Mutations in this gene can result in vitamin D-dependent rickets type I.

Note: This product is for in vitro research use only