Mouse Uroporphyrinogen decarboxylase (UROD) ELISA Kit

Catalog No: #EK5930

Package Size: #EK5930-1 48T #EK5930-2 96T

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Mouse Uroporphyrinogen decarboxylase (UROD) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	RP11-69J16.2; PCT; fifth enzyme of heme biosynthetic pathway|fifth enzyme of the heme biosynthetic pathway|uroporphyrinogen III decarboxylase
Accession No.	P70697
Uniprot	P70697
GeneID	22275;
Storage	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. 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).

Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.078 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 UROD in samples. An antibody specific for UROD has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyUROD present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for UROD 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 UROD bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:URODencodes the fifth enzyme of the heme biosynthetic pathway. This enzyme is responsible for catalyzing the conversion of uroporphyrinogen to coproporphyrinogen through the removal of four carboxymethyl side chains.Uroporphyrinogen III decarboxylase (UroD) is a homodimeric enzyme which catalyzes the fifth step in heme biosynthesis: the elimination of carboxyl groups from the four acetate side chains of uroporphyrinogen III to yield coproporphyrinogen III. At low substrate concentrations the reaction is believed to follow an ordered route, with the sequential removal of CO2 from the D, A, B, and C rings, whereas at higher substrate/enzyme levels a random route seems to be operative. The enzyme functions as a dimer in solution, and both the enzymes from human and tobacco have been crystallized and solved at good resolutions.

Note: This product is for in vitro research use only