Human Sepiapterin reductase (SPR) ELISA Kit

Catalog No: #EK6609

Package Size: #EK6609-1 48T #EK6609-2 96T

Orders: order@signalwayantibody.com
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Description

Product Name	Human Sepiapterin reductase (SPR) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	SDR38C1; sepiapterin reductase|short chain dehydrogenase/reductase family 38C; member 1
Accession No.	P35270
Uniprot	P35270
GeneID	6697;
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:0.061 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 SPR in samples. An antibody specific for SPR has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySPR present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SPR 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 SPR bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase; EC 1.1.1.153) catalyzes the NADPH-dependent reduction of various carbonyl substances, including derivatives of pteridines, and belongs to a group of enzymes called aldo-keto reductases. SPR plays an important role in the biosynthesis of tetrahydrobiopterin (BH4).

The clone encoded a protein of 261 amino acids with a calculated molecular mass of 28,047 Da. The predicted amino acid sequence of human sepiapterin reductase shows 74% identity with the rat enzyme and a striking homology with human carbonyl reductase, estradiol 17-beta-dehydrogenase, and 3-beta-hydroxy-5-ene steroid dehydrogenase, especially in the N-terminal region.

Note: This product is for in vitro research use only