

Rat Dihydropteridine reductase (QDPR) ELISA Kit

Catalog No: #EK7863

Package Size: #EK7863-1 48T #EK7863-2 96T

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Description

Product Name	Rat Dihydropteridine reductase (QDPR) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	DHPR; FLJ42391; PKU2; SDR33C1; 6;7-dihydropteridine reductase short chain dehydrogenase/reductase family 33C; member 1
Accession No.	P11348
Uniprot	P11348
GeneID	64192;
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:Request Information

Sensitivity:Request Information

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:Sandwich**Test principle:**This assay employs a two-site sandwich ELISA to quantitate QDPR in samples. An antibody specific for QDPR has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyQDPR present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for QDPR 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 QDPR bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**QDPR (quinoid dihydropteridine reductase) is part of the pathway that recycles a substance called tetrahydrobiopterin, also known as BH4. Tetrahydrobiopterin works with an enzyme called phenylalanine hydroxylase to process a substance called phenylalanine. Phenylalanine is an amino acid (a building block of proteins) that is obtained through the diet; it is found in all proteins and in some artificial sweeteners. When tetrahydrobiopterin interacts with phenylalanine hydroxylase, tetrahydrobiopterin is altered and must be recycled to a usable form. The regeneration of this substance is critical for the proper processing of several other amino acids in the body. Tetrahydrobiopterin also helps produce certain chemicals in the brain called neurotransmitters, which transmit signals between nerve cells.

Note: This product is for in vitro research use only