## **Product Datasheet**

## Bovine Nicotinate-nucleotide pyrophosphorylase (QPRT) ELISA Kit

Catalog No: #EK7850

Package Size: #EK7850-1 48T #EK7850-2 96T



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

Description	
Product Name	Bovine Nicotinate-nucleotide pyrophosphorylase (QPRT) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Bovine (Bos taurus; Cattle)
Other Names	QPRTase; nicotinate-nucleotide pyrophosphorylase (carboxylating)
Accession No.	Q3T063
Uniprot	Q3T063
GenelD	614254;
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:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate QPRT in samples. An antibody specific for QPRT has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyQPRT present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for QPRT 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 QPRT bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Quinolinate is an intermediate in the de novo synthesis pathway of NAD from tryptophan and acts as a potent endogenous excitotoxin through hyperstimulation of N-methyl D-aspartate (NMDA) receptor in the neuron. Elevation of quinolinate levels in the human brain has been postulated to be involved in the pathogenesis of neurodegenerative disorders. Mammalian quinolinate phosphoribosyltransferase (QPRTase) is a key enzyme in catabolism of quinolinate. This gene encodes a key enzyme in catabolism of quinolinate, an intermediate in the tryptophan-nicotinamide adenine dinucleotide pathway. Quinolinate acts as a most potent endogenous exitotoxin to neurons. Elevation of quinolinate levels in the brain has been linked to the pathogenesis of neurodegenerative disorders such as epilepsy, Alzheimer's disease, and Huntington's disease.

Note: This product is for in vitro research use only