## Mouse Glutaminyl-peptide cyclotransferase (QPCT) ELISA Kit

SAB Signalway Antibody

Catalog No: #EK7853

Package Size: #EK7853-1 48T #EK7853-2 96T

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

## Description

Product Name	Mouse Glutaminyl-peptide cyclotransferase (QPCT) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	GCT; QC; glutaminyl cyclase
Accession No.	Q9CYK2
Uniprot	Q9CYK2
GeneID	70536;
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 QPCT in samples. An antibody specific for QPCT has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyQPCT present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for QPCT 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 QPCT bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview: QPCT encodes human pituitary glutaminyl cyclase, which is responsible for the presence of pyroglutamyl residues in many neuroendocrine peptides. The amino acid sequence of this enzyme is 86% identical to that of bovine glutaminyl cyclase.

The deduced 361-amino acid protein has a calculated molecular mass of about 41 kD. It contains an N-terminal signal peptide region, several glycosylation and phosphorylation sites, and 2 cysteine residues conserved between the bovine and human enzymes. QPCT shares 86% overall sequence identity with the bovine homolog. Glutaminyl cyclase expression was upregulated in the cortices of individuals with Alzheimer disease and correlated with the appearance of pE-modified amyloid beta.

Note: This product is for in vitro research use only