

Datasheet for ABIN5654676

Glutaminase ELISA Kit



Overview

Quantity:	96 tests
Target:	Glutaminase (GLS)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	0.312 ng/mL - 20 ng/mL
Minimum Detection Limit:	0.312 ng/mL
Application:	ELISA

Product Details

Sample Type:	Plasma, Serum, Tissue Homogenate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	This assay has high sensitivity and excellent specificity for detection of Glutaminase (GLS). No significant cross-reactivity or interference between Glutaminase (GLS) and analogues was observed.
Sensitivity:	0.113 ng/mL

Target Details

Target:	Glutaminase (GLS)
Alternative Name:	Glutaminase (GLS Products)

Target Details

Background:	Gene Name: Glutaminase
	Gene Aliases: GLS1, Glutaminase kidney isoform, mitochondrial, K-glutaminase, L-glutamine
	amidohydrolase
Gene ID:	2744
UniProt:	094925
Pathways:	Feeding Behaviour, Dicarboxylic Acid Transport, Warburg Effect
Application Details	
Comment:	The stability of 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. To minimize extra influence
	on the performance, operation procedures and lab conditions, especially room temperature, air
	humidity, incubator temperature should be strictly controlled. It is also strongly suggested that
	the whole assay is performed by the same operator from the beginning to the end.
Assay Time:	3 h
Plate:	Pre-coated
Protocol:	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate
	provided in this kit has been pre-coated with an antibody specific to Glutaminase (GLS).
	Standards or samples are then added to the appropriate microtiter plate wells with a biotin-
	conjugated antibody specific to Glutaminase (GLS). Next, Avidin conjugated to Horseradish
	Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution
	is added, only those wells that contain Glutaminase (GLS), biotin-conjugated antibody and
	enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is
	terminated by the addition of sulphuric acid solution and the color change is measured
	spectrophotometrically at a wavelength of 450nm \pm 10nm. The concentration of Glutaminase
	(GLS) in the samples is then determined by comparing the O.D. of the samples to the standard
	curve.
Assay Precision:	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level
	Glutaminase (GLS) were tested 20 times on one plate, respectively
	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level
	Glutaminase (GLS) were tested on 3 different plates, 8 replicates in each plate. $CV(\%)$ =
	SD/meanX100
	Intra-Assay: CV<10%
	Inter-Assay: CV<12%

Application Details

Restrictions:	For Research Use only
Handling	
Handling Advice:	The Stop Solution is acidic. Do not allow to contact skin or eyes. Calibrators, controls and
	specimen samples should be assayed in duplicate. Once the procedure has been started, all
	steps should be completed without interruption.
Storage:	4 °C,-20 °C
Storage Comment:	-20°C. Bring all reagents to room temperature before beginning test. The kit may be stored at
	4°C for immediate use within two days upon arrival. Reseal any unused strips with desiccant
	pack. Minimize freeze/thaw cycles.
Expiry Date:	4-8 months