

# Datasheet for ABIN5651359

# **Aconitase 1 ELISA Kit**



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Quantity:	96 tests
Target:	Aconitase 1 (ACO1)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	0.625 ng/mL - 40 ng/mL
Minimum Detection Limit:	0.625 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 Aconitase 1 (ACO1). No significant cross-reactivity or interference between Aconitase 1 (ACO1) and analogues was observed.	
Sensitivity:	0.267 ng/mL	

## **Target Details**

Target:	Aconitase 1 (ACO1)
Alternative Name:	Aconitase 1 (ACO1 Products)

## Target Details

- Target Details			
Background:	Gene Name: Aconitase 1		
	Gene Aliases: IREB1, IRP1, IREBP, Iron regulatory protein 1, Iron-responsive element-binding protein 1, Cytoplasmic aconitate hydratase, Citrate hydro-lyase, Ferritin repressor protein		
Gene ID:	48		
UniProt:	P21399		
Pathways:	Transition Metal Ion Homeostasis		
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 Aconitase 1 (ACO1). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Aconitase 1 (ACO1). 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 Aconitase 1 (ACO1), 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 ± 10nm. The concentration of Aconitase 1 (ACO1) 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 Aconitase 1 (ACO1) were tested 20 times on one plate, respectively Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Aconitase 1 (ACO1) 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