



Monkey acid phosphatase 5, tartrate resistant (ACP5) ELISA kit (0.781-50 ng/mL)

Cat. No.:	OB0525WXX-130
Assay Type:	Quantitative sandwich ELISA
Target Species:	Monkey
Assay Target:	ACP5
Size:	24T; 48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description

Monkey acid phosphatase 5, tartrate resistant (ACP5) ELISA kit (0.781-50 ng/mL) is a ready-to-use ELISA kit for analyzing monkey ACP5 levels with a detection range of 0.781-50 ng/mL and a sensitivity of 0.47 ng/mL. This kit has high sensitivity.

Assay Principle

This ELISA kit uses the sandwich-ELISA method. The ELISA plate in the kit is pre-coated with an antibody specific for ACP5. Standards or samples are added to the corresponding microplate wells and bound to the specific antibody. The biotinylated detection antibody specific for ACP5 and the avidin-HRP conjugate are then added sequentially to each microplate well and incubated. The free components are washed away, and substrate solution is added to each well. Only wells containing ACP5, biotinylated detection antibody, and avidin-HRP conjugate will appear blue. Upon addition of sulfuric acid solution, the enzyme-substrate reaction terminates, and the color changes to yellow. Optical density (OD) is measured spectrophotometrically at $450 \text{ nm} \pm 2 \text{ nm}$. The OD value is proportional to the concentration of ACP5. The concentration of ACP5 in the sample can be calculated by comparing the OD value of the sample with the standard curve.



Background

ACP5 is involved in the dephosphorylation of proteins. Its expression appears to increase in certain pathological states. Mice overexpressing ACP5 have been found to exhibit hyperplastic obesity. There are two phenotypes of this enzyme: 5a and 5b. TRAP 5a binds to preadipocytes and may exert cell number-regulating activity, inducing preadipocyte proliferation/differentiation. TRAP 5b may also induce the proliferation of certain cell types.

Synonyms

HPAP; TRAP; TRACP5a; TRACP5b; TrATPase; Tartrate-resistant acid phosphatase type 5; Tartrate-resistant acid ATPase; TrATPase; Type 5 acid phosphatase; Tartrate-resistant acid phosphatase; TRAP 5; ACP 5; EC 3.1.3.2

Formula Weight

36,599 Da

Applications

Monkey acid phosphatase 5, tartrate resistant (ACP5) ELISA kit (0.781-50 ng/mL) is designed for the *in vitro* quantitative analysis of ACP5 levels in monkey serum, plasma, and biological fluid samples.

Research Area

Hormone regulation; Metabolites; Defense response; Inflammatory; Obesity

Specification

Sample Type

Serum; Plasma; Biological fluids

Detection Range

0.781-50 ng/mL

Sensitivity

0.47 ng/mL

Cross-reactivity

No significant cross-reactivity or interference was observed.

Storage

Store at 4°C.