



Human acid phosphatase 5, tartrate resistant (ACP5) ELISA kit (0.781-50 ng/mL, 0.469 ng/mL)

Cat. No.:	OB0525WXX-126
Assay Type:	Quantitative sandwich ELISA
Target Species:	Human
Assay Target:	ACP5
Size:	1 kit

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

Product Overview

Description

Human acid phosphatase 5, tartrate resistant (ACP5) ELISA kit (0.781-50 ng/mL, 0.469 ng/mL) is a ready-to-use ELISA kit for analyzing human ACP5 levels with a detection range of 0.781-50 ng/mL and a sensitivity of 0.469 ng/mL.

Assay Principle

The kit is based on sandwich ELISA. The anti-human ACP5 antibody is pre-coated on a 96-well plate. A biotin-conjugated anti-human ACP5 antibody is then used as the detection antibody. Standards, test samples, and biotin-conjugated detection antibody are subsequently added to the wells and washed with buffer. HRP-strept avidin is added, and the unbound conjugate is washed away with washing solution. TMB substrate is used to show the HRP enzyme reaction. TMB produces a blue product catalyzed by HRP, which turns yellow upon addition of an acidic termination solution. The density of yellow color is proportional to the amount of human ACP5 sample captured in the plate. The concentration of human ACP5 can be calculated by reading the absorbance at 450 nm with a microplate reader.

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	Human acid phosphatase 5, tartrate resistant (ACP5) ELISA kit (0.781-50 ng/mL, 0.469 ng/mL) is designed for the <i>in vitro</i> quantitative analysis of ACP5 levels in human serum, plasma, and other biological fluid samples.
Research Area	Hormone regulation; Metabolites; Defense response; Inflammatory; Obesity

Specification

Sample Type	Serum; Plasma; Other biological fluids
Detection Range	0.781-50 ng/mL
Sensitivity	0.469 ng/mL
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at -20°C (microplate, standard) and 2-8°C (other reagents).