

Rat Retinol binding protein 4 (RBP4) ELISA Kit

Catalog No: #EK7557



Package Size: #EK7557-1 48T #EK7557-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	Rat Retinol binding protein 4 (RBP4) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	OTTHUMP0000020116 retinol-binding protein 4; interstitial retinol-binding protein 4; plasma
Accession No.	P06912
Uniprot	P06912
GeneID	100009161;
Storage	<p>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.</p> <p>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).</p>

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.117 ng/mL

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 RBP4 in samples. An antibody specific for RBP4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyRBP4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for RBP4 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 RBP4 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Retinol binding protein (RBP) 4 is the only specific transport protein for vitamin A in the circulation whose function is to deliver vitamin to target tissues. In obesity and type 2 diabetes, expression of Glut4 is significantly impaired in adipocytes. Glucose transport via Glut4 is the rate-limiting step for glucose use by muscle and adipose tissue.

Yang et al. noted that adipocytespecific deletion of Gluts led to notable elevation of RBP4 causing systemic insulin resistance, and that reduction of RBP4 improved insulin resistance. This identified a novel role of RBP4 in regulating insulin action and RBP4 is recorded as an adipocytederived hormone. Thus, measurement of serum or plasma RBP4 is a useful means for understanding of metabolic disorders.

Note: This product is for in vitro research use only