

## RBP4

Catalog # PVGS1541

## **Product Information**

Primary Accession P02753
Species Human

Sequence Glu19-Leu201

**Purity** > 97% as analyzed by SDS-PAGE

> 97% as analyzed by HPLC

**Endotoxin Level** 

**Biological Activity** Measured by its ability to bind all-trans retinoic acid. The binding of retinoic

acid results in the quenching of Trp fluorescence in RBP4. > 1.0 ☐M all-trans

retinoic acid is bound under the described conditions.

**Expression System** HEK 293

Formulation Lyophilized from a 0.2 Im filtered solution in 50 mM Tris-HCl, 150 mM NaCl,

pH 7.5.

**Reconstitution** It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

ddH<sub>2</sub>O or PBS up to 100 □g/ml.

**Storage & Stability** Upon receiving, this product remains stable for up to 6 months at lower than

-70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw

cycles.

## **Additional Information**

**Gene ID** 5950

Other Names Retinol-binding protein 4, Plasma retinol-binding protein, PRBP, RBP, Plasma

retinol-binding protein(1-182), Plasma retinol-binding protein(1-181), Plasma retinol-binding protein(1-179), Plasma retinol-binding protein(1-176), RBP4

**Target Background**The properties of retinol binding protein is the transport carrier of vitamin A

in the plasma. Human-retinol binding protein is a single-chain polypeptide with a molecular weight of approximately 21000 and one binding site for retinol and other forms of vitamin A. In addition, compounds related to retinol, such as retinal, retinoic acid, retinyl esters and geometric isomers of retinol and of retinal were evaluated for their ability to bind to this protein. In plasma, RBP4-retinol forms a complex with transthyretin (TTR), also known as

thyroxine-binding protein and prealbumin. Defects in RBP4 cause retinol-binding protein deficiency, which affects night vision.

## **Protein Information**

Name RBP4

**Function** Retinol-binding protein that mediates retinol transport in blood plasma

(PubMed:<u>5541771</u>). Delivers retinol from the liver stores to the peripheral tissues (Probable). Transfers the bound all-trans retinol to STRA6, that then facilitates retinol transport across the cell membrane (PubMed:<u>22665496</u>).

**Cellular Location** Secreted

**Tissue Location** Detected in blood plasma and in urine (at protein level).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.