10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RBP4

Catalog # PVGS1541

Specification

RBP4 - Product Information

Primary Accession P02753

Species
Human

Sequence
Glu19-Leu201

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

Endotoxin Level
< 0.2 EU/ µg of protein by gel clotting method

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 µM all-trans retinoic acid is bound under the described conditions.

Expression System
HEK 293

Formulation **Lyophilized from a 0.2 µm 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_2O or PBS up to 100 µg/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.

RBP4 - 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.

RBP4 - Protein Information

Name RBP4

Function
Retinol-binding protein that mediates retinol transport in blood plasma (PubMed:5541771). 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:22665496).

Cellular Location
Secreted

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

RBP4 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RBP4 - Images