For Research Use Only

Recombinant Rat RBP4 protein (rFc Tag)

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Catalog Number: Eg9545

Basic Information

Species:
Rat

Purity:
>90 %, SDS-PAGE

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Rat RBP4 protein Glu19-Leu201 (Accession# P04916) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
25703

Accession:
P04916

Predicted Molecular Mass:
47.0 kDa

SDS-PAGE:
44-50 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

RBP4 (retinol-binding protein 4) belongs to the lipocalin family and is the specific carrier for retinol (Vitamin A) in the blood. It is mainly synthesized in the liver and circulates in the bloodstream bound to retinol in a complex with transthyretin. RBP4 acts as a drug target for ophthalmology research and reduction in serum RBP4 level inhibits lipofuscin without inhibiting the visual cycle. Urinary RBP4 could act as a marker for glomerular disease. And RBP4 also was identified as an adipokine that elevated in some insulin-resistant states. Measurement of serum RBP4 could be used to assess the risk of insulin resistance, type 2 diabetes, obesity, and cardiovascular disease.

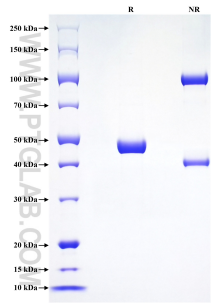
References

1. P A Peterson. et al. (1971). J Biol Chem. 246(1): 44-9.
2. Yang Q. et al. (2005). Nature. 436(7049): 356-62.
3. Frey SK. et al. (2008). Lipids Health Dis. 7(29).
4. Christopher L Cioffi. et al. (2014). J Med Chem. 57(18): 7731-57.

Synonyms

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

Selected Validation Data



Purity of Recombinant Rat RBP4 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.