

Recombinant Human RBP4, His-tagged

Cat. No. RBP4-112H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human RBP-4 produced in <i>E. Coli</i> is a single, non-glycosylated, polypeptide chain containing 204 amino acids and having a molecular mass of 23 kDa. RBP4 is fused to N-terminus His tag which contains additional 21 amino acids. RBP4 sequence is identical to UniProtKB/Swiss-Prot entry Q5VY30 amino acids 16–199. The Retinol Binding Protein-4 is purified by proprietary chromatographic techniques.
Species	Human
Source	E.coli
Description	Retinol binding protein 4(RBP4) belongs to the lipocalin family and is the specific carrier for retinol (vitamin A alcohol) in the blood. This protein was found to be expressed and secreted by adipose tissue, and was strongly associated with insulin resistance. It delivers retinol from the liver stores to the peripheral tissues. In plasma, the RBP-retinol complex interacts with transthyretin which prevents its loss by filtration through the kidney glomeruli. RBP4 delivers retinol from the liver to the peripheral tissues. In plasma, the rbp-retinol complex interacts with transthyretin, this prevents its loss by filtration through the kidney glomeruli.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

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Formulation	RBP-4 His tag was lyophilized from a concentrated (0.5mg/ml) solution containing PBS pH-7.5.
Solubility	It is recommended to reconstitute the lyophilized Retinol binding protein-4 in sterile deionized water to a working volume of 0.5 mg/mL and let the lyophilized pellet dissolve completely
Amino acid sequence	MSWWHHHHHH NWNIPPTQDT TERDCRVSSF RVKENFDKAR FSGTWYAMAK KDPEGLFLQD NIVAEFSVDE TGQMSATAKG RVRLNNWDV CADMVGTFDT TEDPAKFKMK YWGVASFLQK GNDDHWIVDT DYDTYAVQYS CRLNLDGTC ADSYSFVFSR DPNGLPPEAQ KIVRQRQEEL CLARQYRLIV HNGYCDGRSE RNLL.
Storage	Lyophilized Retinol binding protein-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Retinol binding protein-4 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	RBP4 retinol binding protein 4, plasma [Homo sapiens]
Synonyms	Retinol Binding Protein 4; RBP-4; RBP4; Plasma retinol-binding protein; PRBP; RBP; OTTHUMP00000020114; OTTHUMP00000020116; retinol binding protein 4, plasma; retinol-binding protein 4, interstitial.
Gene ID	5950
mRNA Refseq	NM_006744
Protein Refseq	NP_006735

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MIM	180250
UniProt ID	P02753
Chromosome Location	10q23-q24
Function	binding; retinal binding; retinol binding; retinol transporter activity; transporter activity

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