

# **Product Datasheet**

## 41060. Recombinant Human Retinol Binding Protein 4 (hRBP4)

Type:	Recombinant	Cat. No.:	41060
Tag:	His	Size:	0.1 mg
Source:	E.Coli	Purity:	>95%
Other names:	RBP4	Species:	Human

### **Introduction to the Molecule**

Retinol binding protein 4(RBP4), originally known as a specific transport of retinol in blood, is also a novel inflammatory and insulin resistance marker. Serum levels of RBP4 increased in insulin resistant and diabetes. Studies both in human and animal suggested that serum levels of RBP4 plays a key role in the link between obesity, insulin resistant and diabetes. Animal experiments found that increased secretion of RBP4 might reduces insulin-dependent glucose uptake by muscle tissue by reducing the activity of PI(3)K (phosphoinositide 3-kinase), and increased hepatic glucose output by increasing the expression of the enzyme PEPCK. However, whether serum RBP4 could be a biomarker of type 2 diabetes risk still remain unclear.

#### **Description**

Total 211 AA. Mw: 24.4 kDa (calculated). N-terminal His-tag and TEV cleavage site, 28 extra AA (highlighted).

#### **Amino Acid Sequence**

**MSYYHHHHHH DYDIPTTENLYFQGA**MGSER DCRVSSFRVK ENFDKARFSG TWYAMAKKDP EGLFLQDNIV AEFSVDETGQ MSATAKGRVR LLNNWDVCAD MVGTFTDTED PAKFKMKYWG VASFLQKGND DHWIVDTDYD TYAVQYSCRL LNLDGTCADS YSFVFSRDPN GLPPEAQKIV RQRQEELCLA RQYRLIVHNG YCDGRSERNLL

Formulation: Lyophilized in 1 mg/mL in PBS.

**Reconstitution:** Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.

**Storage:** Store lyophilized protein at  $-20^{\circ}$ C. Aliquot reconstituted protein and store at  $-80^{\circ}$ C. Avoid repeated freezing/thawing cycles.

Applications: ELISA and Western blotting.

#### **Quality Control Test**

BCA to determine quantity of the protein. SDS PAGE to determine purity of the protein.

**SDS-PAGE gel** 

