
Recombinant Human Retinol Binding Protein 4

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 **DYDIPTTENL** **YFQGAMG**SER DCRVSSFRVK ENFDKARFSG
TWYAMAKKDP EGLFLQDNIV AEFSVDETGQ MSATAKGRVR LLNNWDVCAD
MVGTFFTDTE PAKFKMKYWG VASFLQKGND DHWIVD TDYD TYAVQYSCRL
LNLDGTCADS YSFVFSRDPN GLPPEAQKIV RQRQEELCLA RQYRLIVHNG
YCDGRSERNL L

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°C. Aliquot reconstituted protein and store at -80°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

