Recombinant Human RBP4 Protein (His Tag)

Catalog Number: PKSH031655

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

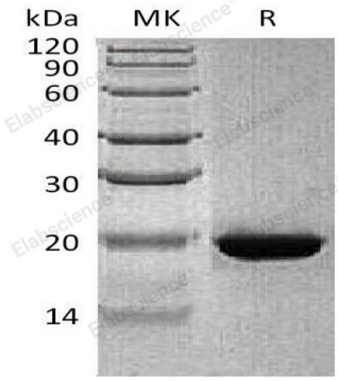
Description

Species	Human
Source	HEK293 Cells-derived Human RBP4 protein Met 1-Leu 201, with an C-terminal His
Calculated MW	23 kDa
Observed MW	23 kDa
Accession	NP_006735.2
Bio-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. The 50% binding concentration (BC50) is > 1.0 μM

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.2 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

Retinol-binding protein 4 (RBP4) is the specific carrier for retinol (also known as vitamin A); and is responsible for the conversion of unstable and insoluble retinol in aqueous solution into stable and soluble complex in plasma through their tight interaction. As a member of the lipocalin superfamily; RBP4 containing a β-barrel structure with a well-defined cavity is secreted from the liver; and in turn delivers retinol from the liver stores to the peripheral tissues. In plasma; the RBP4-retinol complex interacts with transthyretin (TTR); and this binding is crucial for preventing RBP4 excretion through the kidney glomeruli. RBP4 expressed from an ectopic source efficiently delivers retinol to the eyes; and its deficiency affects night vision largely. Recently; RBP4 as an adipokine; is found to be expressed in adipose tissue and correlated with obesity; insulin resistance (IR) and type 2 diabetes (T2DM).

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