Data Sheet (Cat.No.TMPS-00122)

TargetMol

RBP4 Protein, Human, Recombinant (Tris-HCl, His)

General Information

Synonyms:	RBP-4;Retinol-Binding Protein 4
Protein Construction:	Glu19-Leu201
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P02753
Molecular Weight:	~22 kDa (Reducing conditions)

QC Testing

Biological 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. > 1.0 μM all-trans retinoic acid is bound under the described conditions.
Purity:	> 97% as determined by SDS-PAGE; > 97% as determined by HPLC
Endotoxin:	< 0.2 EU/μg of protein as determined by the LAL method.
Formulation:	Lyophilized from a 0.2 μm filtered solution in 50 mM Tris-HCl, 150 mM NaCl, pH 7.5.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

The properties of retinol binding protein is the transport carrier of vitamin A in the plasma. Human-retinol binding protein is a single-chain polypeptide with a molecular weight of approximately 21000 and one binding site for retinol and other forms of vitamin A. In addition, compounds related to retinol, such as retinal, retinoic acid, retinyl esters and geometric isomers of retinol and of retinal were evaluated for their ability to bind to this protein. In plasma, RBP4-retinol forms a complex with transthyretin (TTR), also known as thyroxine-binding protein and prealbumin. Defects in RBP4 cause retinol-binding protein deficiency, which affects night vision.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481