

Synonym

TPBG,5T4,M6P1,5T4AG,WAIF1,5T4 oncofetal antigen,Trophoblast glycoprotein,5T4 oncofetal trophoblast glycoprotein

Source

Biotinylated Human TPBG, His,Avitag (TPG-H82Eb) is expressed from human 293 cells (HEK293). It contains AA Ser 32 - Ser 355 (Accession # [Q13641-1](#)). Predicted N-terminus: Ser 32

Molecular Characterization

TPBG(Ser 32 - Ser 355) Q13641-1	Poly-his	Avi
------------------------------------	----------	-----

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 39.0 kDa. The protein migrates as 50-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

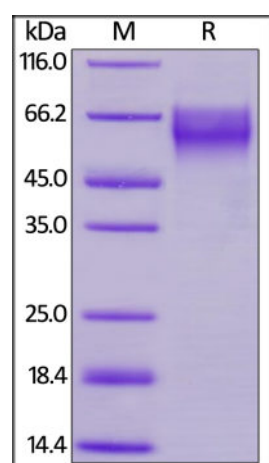
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

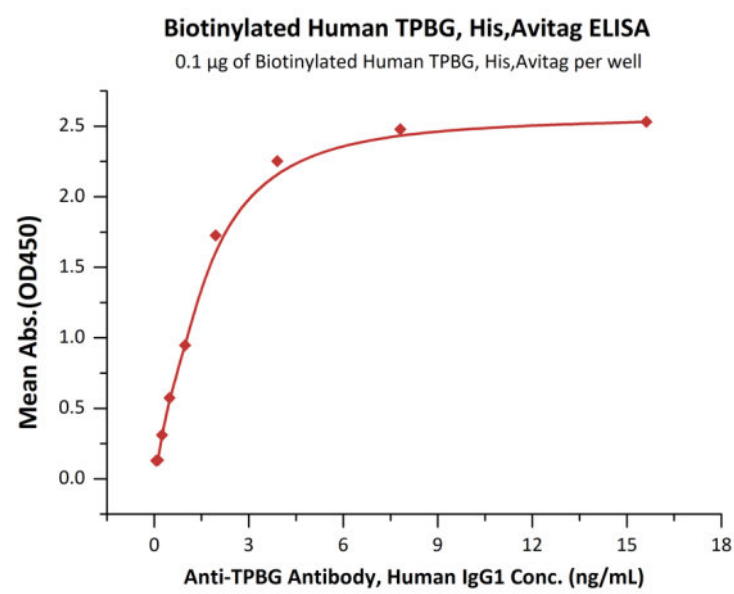
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Biotinylated Human TPBG, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Biotinylated Human TPBG, His,Avitag (Cat. No. [TPG-H82Eb](#)) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. [STN-N5116](#)) precoated (0.5 µg/well) plate can bind Anti-TPBG Antibody, Human IgG1 with a linear range of 0.1-4 ng/mL (QC tested).

Background

Trophoblast glycoprotein (TPBG), also known as 5T4, is the therapeutic target of several anticancer agents currently in clinical development, largely due to its high expression in tumors and low expression in normal adult tissues. This gene encodes a leucine-rich transmembrane glycoprotein that may be involved in cell adhesion. TPBG is expressed by all types of trophoblasts as early as 9 weeks of development.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.