

## **Synonym**

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

#### Source

Human TPBG, Fc Tag(TPG-H5253) 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) Fc(Pro 100 - Lys 330)
Q13641-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 61.8 kDa. The protein migrates as 80-115 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

## **Purity**

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

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

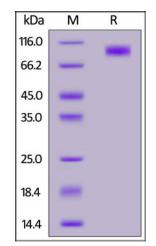
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

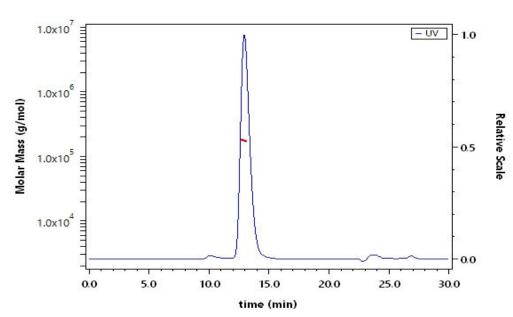
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human TPBG, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **SEC-MALS**



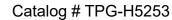
The purity of Human TPBG, Fc Tag (Cat. No. TPG-H5253) is more than 95% and the molecular weight of this protein is around 158-192 kDa verified by SEC-MALS.

Report

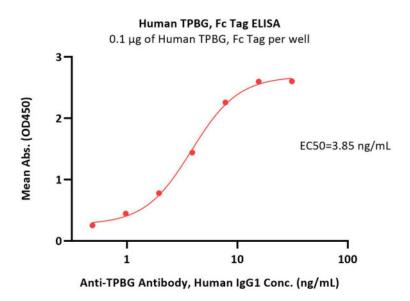
# **Bioactivity-ELISA**



# **Human TPBG / 5T4 Protein, Fc Tag (MALS verified)**







Immobilized Human TPBG, Fc Tag (Cat. No. TPG-H5253) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-TPBG Antibody, Human IgG1 with a linear range of 0.5-8 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.

