

# Human TPBG/5T4 Protein

Cat. No. 5T4-HM401

## Description

<b>Source</b>	Recombinant Human TPBG/5T4 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus It contains Ser32-Ser355.
<b>Accession</b>	Q13641-1
<b>Molecular Weight</b>	The protein has a predicted MW of 38.2 kDa. Due to glycosylation, the protein migrates to 50-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE; > 95% as determined by HPLC

## Formulation and Storage

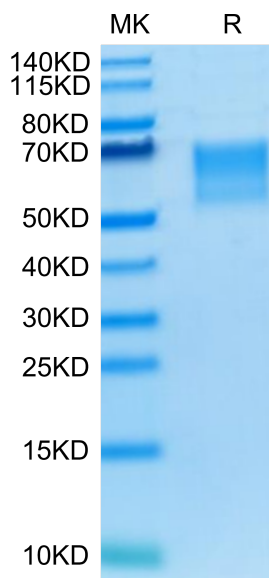
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The oncofetal tumor-associated antigen 5T4 (TBGP) has been linked with CSC properties in several different malignancies. 5T4 has functional attributes that are relevant to the spread of tumors including through EMT, CXCR4/CXCL12, Wnt, and Hippo pathways which may all contribute through the mobilization of CSCs.

## Assay Data

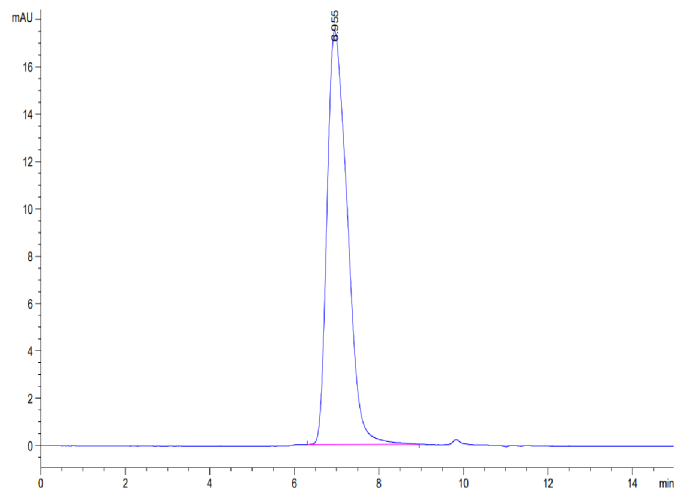
### Bis-Tris PAGE



Human TPBG on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

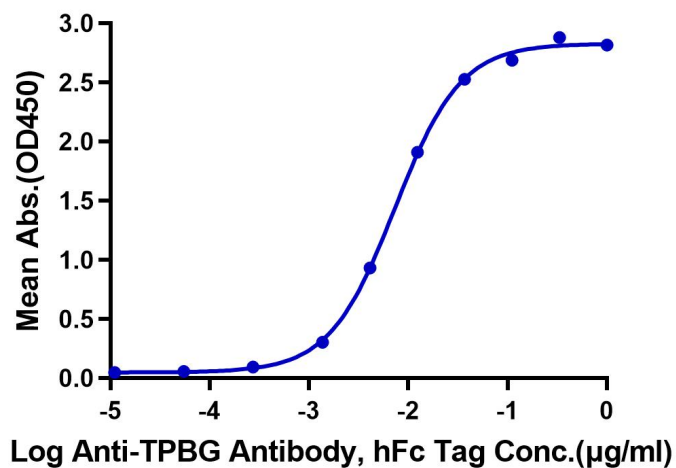


The purity of Human TPBG is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human TPBG, His Tag ELISA

0.05µg Human TPBG, His Tag Per Well



Immobilized Human TPBG, His Tag at 0.5 µg/ml (100 µl/Well) on the plate. Dose response curve for Anti-TPBG Antibody, hFc Tag with the EC50 of 7.3 ng/ml determined by ELISA.