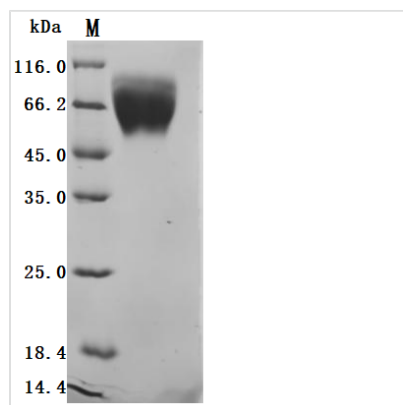


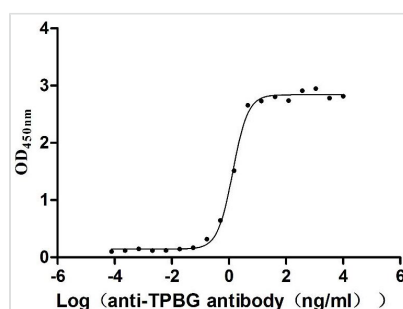


Recombinant Human Trophoblast glycoprotein (TPBG), partial (Active)

Product Code	CSB-MP024093HUb0
Abbreviation	Recombinant Human TPBG protein, partial (Active)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q13641
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Human TPBG at 2 µg/mL can bind Anti-TPBG recombinant antibody (CSB-RA024093MA1HU), the EC50 is 1.230-1.519 ng/mL.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	SSPTSSASSFSSSAPFLASAVSAQPPLPDQCPALCECSEAARTVKCVNRNLTE VPTDLPAYVRNLFLTGNQLAVLPAGAFARRPPLAELAALNLSGSRLDEV RAGA FEHLPSLRQLDL SHNPLADLSPFAFSGSNASVSAPSPLVELILNHIVPPEDERQ NRSFEGMVVAALLAGRALQGLRRLELASNHFLYLP RDVLAQLPSLRHLDLSNN SLVSLTYVSFRNLTHLESLHLEDNALKVLHNGTLAELQGLPHIRVFLDNNPWVC DCHMADMVTWLKETEVVQ GKDR LTCAYPEKMRNRVLLELNSADLDCDPILPP SLQTS
Research Area	Cancer
Source	Mammalian cell
Target Names	TPBG
Expression Region	32-355aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	38.9 kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity
Measured by its binding ability in a functional ELISA. Immobilized Human TPBG at 2 µg/mL can bind Anti-TPBG recombinant antibody (CSB-RA024093MA1HU), the EC₅₀ is 1.230-1.519 ng/mL.

Description

This Human TPBG recombinant protein was produced in mammalian cell, where the gene sequence encoding Human TPBG (32-355aa) was expressed with the N-terminal 10xHis tag. The purity of this TPBG protein was greater than 95%. The activity was validated.

TPBG was first discovered in embryonic development. It is highly expressed in placental trophoblast cells and is basically absent in normal tissues. It only exists in some special epithelia, such as basal stratified squamous epithelium, glandular and ductal epithelium, and retina. Secondary neurons and olfactory bulbs. Later, it was found that TPBG is expressed in many cancers, including uterine cancer, ovarian cancer, colorectal cancer, gastric cancer, kidney cancer, prostate cancer and so on. In colon, gastric, or ovarian cancer, there is evidence that the expression of TPBG is associated with low cancer cure rates. In the tissues of non-small cell lung cancer, kidney cancer or pancreatic cancer, the expression of TPBG is as high as more than 95%. Overexpression of TPBG in tumors is associated with disease progression. It may play a role in affecting the connections between tumor cells, affecting cell morphology, motility and adhesion, and then promoting distant metastasis.

Endotoxin

Less than 1.0 EU/ug as determined by LAL method.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.



Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.