



# Recombinant Protein Technical Manual

## Recombinant Human TPBG/5T4 Protein (His Tag)

RPES4169

### Product Data:

**Product SKU:** RPES4169

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q13641

### Protein Information:

**Molecular Mass:** 36.1 kDa

**AP Molecular Mass:** 55-80 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 5T4 Protein, Human;5T4AG Protein, Human;M6P1 Protein, Human;WAIF1 Protein, Human

## Immunogen Information:

**Sequence:** Ser32-Ser355

## Background:

Trophoblast glycoprotein, also known as TPBG and 5T4, it belongs to the LRR family of proteins. The C-terminus of LRR N-terminal cap (LRRNT) and LRR 1 are essential for the inhibition of the Wnt signaling pathway. TPBG may function as an inhibitor of Wnt/beta-catenin signaling by indirectly interacting with LRP6 and blocking Wnt3a-dependent LRP6 internalization. It expressed by all types of trophoblasts as early as 9 weeks of development. In adult tissues, the expression is limited to a few epithelial cell types but is found on a variety of carcinoma.