



# Recombinant Protein Technical Manual

**Recombinant Human 4BBL/TNFSF9 Protein (His Tag)(Active)**  
RPES1680

## Product Data:

**Product SKU:** RPES1680

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P41273

## Protein Information:

**Molecular Mass:** 41.8 kDa

**AP Molecular Mass:** 16-20 kDa

**Tag:** C-6His

**Bio-activity:** Immobilized Human 4BB-His(Cat: PKSH032025) at 10µg/ml(100 µl/well) can bind Biotinylated Human 4BBL-His. The ED50 of Human 4BBL-His is 147.3 ug/ml .

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

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

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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 20mM PB, 150mM NaCl,pH7.4.

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

**Application:** Functional ELISA

**Synonyms:** Tumor necrosis factor ligand superfamily member 9; 4BB ligand; 4BBL; TNFSF9

## Immunogen Information:

**Sequence:** Arg71-Glu254

## Background:

Tumor necrosis factor ligand superfamily member 9(4BBL) is single-pass type II membrane protein which is a member of the the tumor necrosis factor family. 4BBL is a 254 amino acids cytokine that is expressed in brain, placenta, lung, skeletal muscle and kidney. TNFSF9 has been shown to reactivate anergic T lymphocytes in addition to promoting T lymphocyte proliferation. This cytokine may have a role in activation-induced cell death (AICD) and cognate interactions between T-cells and B-cells/macrophages. It has also been shown to be required for the optimal CD8 responses in CD8 T cells, and is thought to be involved in T cell-tumor cell interaction.