**Product Name: Recombinant Human 4-1BBL (N-6His-Flag)**
**Catalog #: PHH2412**

## Summary

| | |
|---|---|
| **Name** | 4-1BB Ligand/4-1BBL/CD137L/TNFSF9 |
| **Purity** | Greater than 95% as determined by reducing SDS-PAGE |
| **Endotoxin level** | <1 EU/μg as determined by LAL test. |
| **Construction** | Recombinant Human 4-1BB Ligand is produced by our Mammalian expression system and the target gene encoding Arg71-Glu254 is expressed with a 6His, Flag tag at the N-terminus. |
| **Accession #** | P41273 |
| **Host** | Human cells |
| **Species** | Human |
| **Predicted Molecular Mass** | 24.5 KDa |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 20mM Tris-HCl, 50mM NaCl, 5% Trehalose, 5% Mannitol, 1mM EDTA, pH8.0. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below. |
| **Stability&Storage** | Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles. |
| **Reconstitution** | Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. |

## SDS-PAGE image

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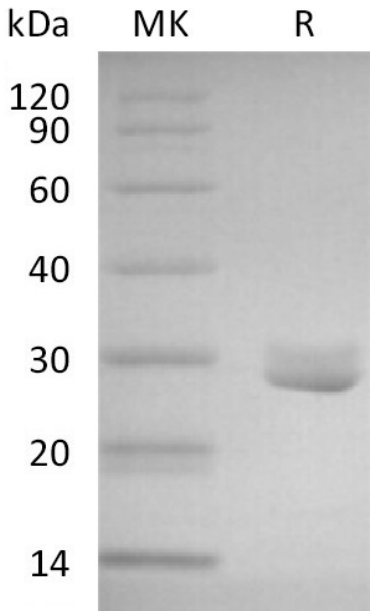


## Alternative Names

Tumor necrosis factor ligand superfamily member 9; 4-1BB ligand; 4-1BBL; TNFSF9

## Background

Tumor necrosis factor ligand superfamily member 9(4-1BBL) is single-pass type II membrane protein which is a member of the the tumor necrosis factor family. 4-1BBL 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.

## Note

For Research Use Only , Not for Diagnostic Use.