

# Human 4-1BB Ligand/TNFSF9 Trimer Protein

Cat. No. BBL-HM141

## Description

<b>Source</b>	Recombinant Human 4-1BB Ligand/TNFSF9 Trimer Protein is expressed from Expi293 with His tag at the N-terminal. It contains Arg71-Glu254.
<b>Accession</b>	P41273
<b>Molecular Weight</b>	The protein has a predicted MW of 61.8 kDa same as Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

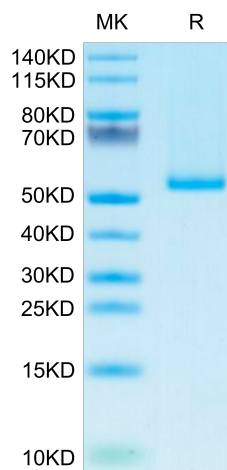
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/ml is recommended (usually we use 1mg/ml solution for lyophilization). Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid freeze-thaw cycles.

## Background

The 4-1BBL is the high affinity ligand of 4-1BB, also known as CD137L or TNFSF9. 4-1BB ligand (4-1BBL) is an inducible molecule present on several APC types, including B cells, macrophages and DCs. 4-1BB:4-1BBL pathway seems to amplify the existing costimulatory signals, even if the engagement of 4-1BB in the presence of a strong TCR signaling can induce IL-2 production in a CD28-independent manner.

## Assay Data

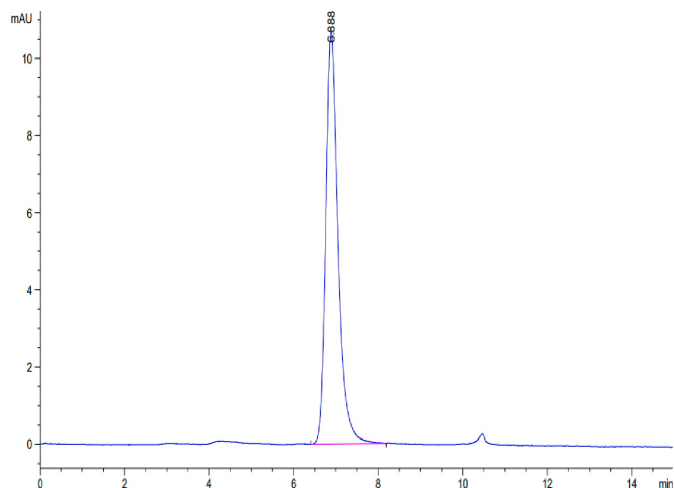
### Tris-Bis PAGE



Human 4-1BB Ligand Trimer on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

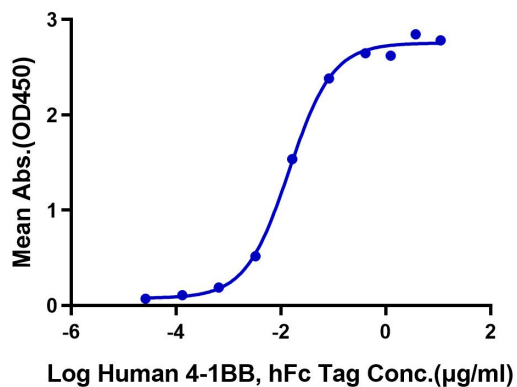


The purity of Human 41BB Ligand Trimer is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human 4-1BB Ligand Trimer, His Tag ELISA

0.1µg Human 4-1BB Ligand Trimer, His Tag Per Well



Immobilized Human 4-1BB Ligand Trimer, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Human 4-1BB, hFc Tag with the EC50 of 14.3ng/ml determined by ELISA.