# Biotinylated Human 4-1BB Ligand/TNFSF9 Trimer Protein (Primary Amine Labeling)





Description	
Source	Recombinant Biotinylated Human 4-1BB Ligand/TNFSF9 Trimer Protein (Primary Amine Labeling) is expressed from HEK293 with monomeric hFc tag at the N-Terminus.
	It contains Arg71-Glu254.
Accession	P41273
Molecular Weight	The protein has a predicted MW of 84.3 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 90% as determined by HPLC

### Formulation and Storage

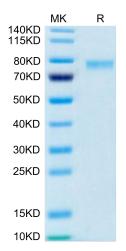
Formulation	Lyophilized from 0.22 $\mu$ m filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize 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.

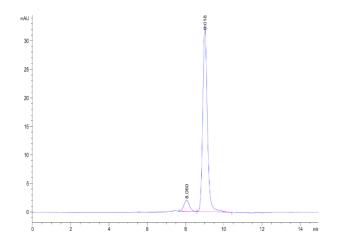
## **Assay Data**

#### **Bis-Tris PAGE**



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

#### **SEC-HPLC**



The purity of Biotinylated Human 4-1BB Ligand (Trimer) is greater than 90% as determined by SEC-HPLC.

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Cat. No. BBL-HM241B

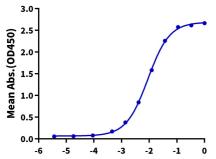


# **Assay Data**

**ELISA Data** 

## Biotinylated Human 4-1BB Ligand (Trimer), hFc Tag ELISA

0.1μg Human 4-1BB, hFc Tag Per Well



Log Biotinylated Human 4-1BB Ligand (Trimer), hFc Tag Conc.( $\mu$ g/ml)

Immobilized Human 4-1BB, hFc Tag at  $1\mu g/ml$  ( $100\mu l/Well$ ) on the plate. Dose response curve for Biotinylated Human 4-1BB Ligand (Trimer), hFc Tag with the EC50 of 9.0ng/ml determined by ELISA.