

## Recombinant Human 4-1BBL/TNFSF9 Protein (His Tag)

Catalog No. PKSH032023

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

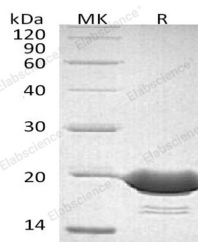
### Description

<b>Synonyms</b>	Tumor necrosis factor ligand superfamily member 9;4-1BB ligand;4-1BBL;TNFSF9
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Arg71-Asp 140
<b>Accession</b>	P41273
<b>Calculated Molecular Weight</b>	20.4 kDa
<b>Observed molecular weight</b>	20 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measure by its ability to induce IL-8 secretion in human PBMCs. The ED <sub>50</sub> for this effect is 1-5 ng/mL.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

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

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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.