

RP00053

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# Recombinant Human TNFSF15/TL1 Protein

Catalog No.: RP00053 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
<I>E. coli</I>	9966	O95150

**Tags**  
No tag

**Synonyms**  
TNFSF15;TL1;TL1A;TNLG1B;VEGI;VEGI1  
92A

## Product Information

Source	Purification
<I>E. coli</I>	≥ 90 % as determined by SDS-PAGE.

**Endotoxin**  
< 1 EU/μg of the protein by LAL method.

**Formulation**  
Lyophilized from a 0.22 μm filtered solution of 20mM Tris, 50mM NaCl, 5% glycerol, pH 8.0. Contact us for customized product form or formulation.

**Reconstitution**  
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

 [www.abclonal.com](http://www.abclonal.com)

## Background

The protein is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This protein is abundantly expressed in endothelial cells, but is not expressed in either B or T cells. The expression of this protein is inducible by TNF and IL-1 alpha. This cytokine is a ligand for receptor TNFRSF25 and decoy receptor TNFRSF21/DR6. It can activate NF-kappaB and MAP kinases, and acts as an autocrine factor to induce apoptosis in endothelial cells. This cytokine is also found to inhibit endothelial cell proliferation, and thus may function as an angiogenesis inhibitor.

## Basic Information

**Description**  
Recombinant Human TNFSF15/TL1 Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Leu72-Leu251) of human TL1A/TNFSF15 (Accession #NP\_005109.2) fused with an initial Met at the N-terminus.

**Bio-Activity**  
1. Measured by its binding ability in a functional ELISA. Immobilized Human TNFSF15 Protein at 5 μg/mL (100 μL/well) can bind DCR3 with a linear range of 0.12-6.98 ng/mL. | 2. Measured by its ability to induce apoptosis of TFD 1 human erythroleukemic cells. The ED<sub>50</sub> for this effect is 52.1-208.5 ng/mL, corresponding to a specific activity of 4.79 × 10<sup>3</sup> ~ 1.92 × 10<sup>4</sup> units/mg.

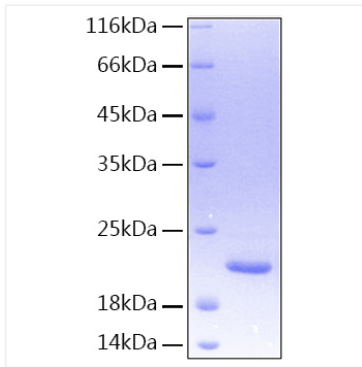
**Shipping**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Operational Notes**  
For your safety and health, please wear a lab coat and disposable gloves for handling.

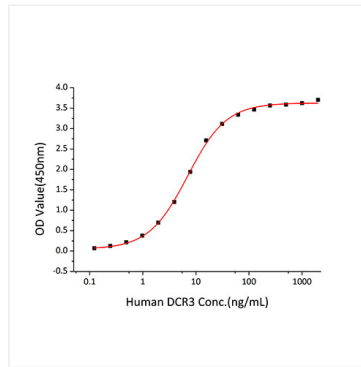
**Storage**  
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

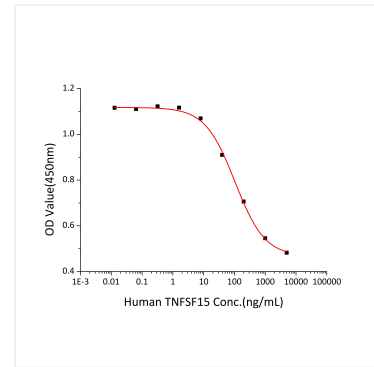
## Validation Data



Recombinant Human TNFSF15/TL1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Human TNFSF15 Protein at 5  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) can bind DCR3 with a linear range of 0.12-6.98 ng/mL.



Recombinant Human TNFSF15 induce apoptosis of  $\text{TF}\alpha$  1 human erythroleukemic cells. The  $\text{ED}_{50}$  for this effect is 52.1-208.5 ng/mL, corresponding to a specific activity of  $4.79 \times 10^3 \sim 1.92 \times 10^4$  units/mg.