

Rev03 Update: Dec,14,2021

#### DATASHEET

# TRAIL/Apo2L, Human

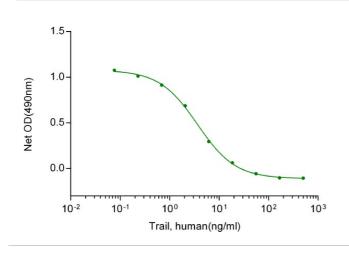
Cat. No.: Z03124

### **Product Introduction**

Species	Human
Protein Construction	Expressed with an N-terminal Met.
	TRAIL/Apo2L (Val114-Gly281) Accession # P50591
Purity	> 95% as analyzed by SDS-PAGE
	> 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/µg of protein by gel clotting method
Biological Activity	$ED_{50}$ < 40.0 ng/ml, measured by the cell growth inhibitory assay using RPMI-8226 cells, corresponding to a specific activity of > 2.5 $\times$ 10 <sup>4</sup> units/mg.
Expression System	E. coli
Apparent Molecular Weight	~19.6 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upor reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at 20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

### Examples





ED<sub>50</sub>< 40 ng/mL, measured by the cell growth inhibitory assay using RPMI-8226 cells, corresponding to a specific activity of >  $2.5 \times 10^4$  units/mg.

## Background

**Target Background :** TRAIL/Apo2L, also known as Tumor Necrosis Factor Super-Family 10 (TNFSF10), is a pleiotropic cytokine thatbelongs to the TNF superfamily. The full length TRAIL expressed in vivo is a Type II transmembrane protein, although the soluble form also exists and functions. TRAIL has four major receptors: two death receptors DR4 and DR5, two decoy receptors DcR1 and DcR2. TRAIL binds to the death receptors, recruits the FAS-associated death domain, activates caspases 8 and 10, and eventually leads to apoptosis. Because of its antitumor potential, TRAIL is actively studied as a therapeutic agent. On the other hand, abnormal expression of TRAIL in small arteries can induce the proliferation of smooth muscle cells, resulting in increasing vascular remodeling and pulmonary arterial hypertension.

Synonyms : TNF-related apoptosis-inducing Ligand; TNFSF10; Apo2 Ligand; TL2; CD\_antigen: CD253; Protein TRAIL; Apo-2L

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.