



PRODUCT DATA SHEET

Product: TRAIL, soluble (human recombinant) kit

Cat. No.: TR-002

Synonyms:

TNFSF 10, Apo-2L, CD253

Background:

TRAIL (Apo-2L) is a 34 kDa type II transmembrane protein belonging to the tumor necrosis factor ligand family. Interactions between TRAIL and TRAIL-R1(DR4) and/or R2(DR5), rapidly induces apoptosis of TRAIL-sensitive cells. Cross-linking recombinant human soluble (rhs) TRAIL molecules greatly enhances the induction. The physiological role of TRAIL is currently unknown.

TRAIL can be injected into mice without toxic side effects. Many tumor cells are killed by TRAIL and injection is being considered as an anti-cancer therapy.

Components:

1 x 10 µg purified rhsTRAIL, (extracellular domain of human TRAIL (aa. 95-281)) fused at the N-terminus to an 8 aa linker peptide and a FLAG tag. The recombinant protein is produced in *E. coli*. Purity is ≥95% as determined by SDS-PAGE.

2 x 50 µg Enhancer

Specificity:

Binds to human and mouse TRAIL receptors and osteoprotegerin (OPG).

Formulation:

rhsTRAIL: lyophilized powder, contains PBS. Prepare sterile stock solution (0.1 mg/mL) by dissolving contents of tube in 100 µL of sterile water.

Enhancer: lyophilized powder, contains PBS. Prepare sterile stock solution (1 mg/mL) by dissolving contents of tube in 50 µL of sterile water.

Further dilutions should be made with medium containing 5% fetal calf serum.

Specific Activity:

ED₅₀: 10 ng/mL (Jurkat Cells)

Storage and Stability:

Stable for at least 6 months when stored at -20°C. Once hydrated, it is recommended to prepare aliquots and store at -20°C. Avoid repeated freeze/thaw cycles.

Applications and Suggested Dilutions:

- Induces apoptosis: In the presence of 2 µg/mL enhancer, rhsTRAIL induces apoptosis of TRAIL sensitive cells at concentrations of 1-100 ng/mL. The enhancer is an antibody that reacts with rhsTRAIL and increases its activity.

The optimal dilution for a specific application should be determined by the researcher.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.