

BACKGROUND

TNF-Related Apoptosis-Inducing Ligand (TRAIL) is produced by a wide variety of cell types and is shown to be a cytotoxic protein that induces apoptosis in tumor cells through activation of the death receptors, DR4 and DR5. Human TRAIL is active on mouse cells.

Recombinant human TRAIL is a non-glycosylated protein, containing the 168 amino acid extracellular portion of TRAIL that is homologous to TNF. It has a molecular mass of 19.5 Da.

Alternative Names:

Apo2L, TL2, Apo2 Ligand, TNFSF10, CD253

Amino Acid Sequence:

MRERGPQRVA AHITGTRGRS NTLSSPNSKN EKALGRKINS
WESSRSGHSF LSNLHLRNGE LVIHEKGFY IYSQTYFRFQ
EEIKENTKND QMVQYIYKY TSYDPILLM KSARNSCWSK
DAEYGLYSIY QGGIFELKEN DRIFVSVTNE HLIDMDHEAS
FFGAFLVG

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human TRAIL is lyophilized from 10 mM Na₂PO₄, pH 7.5 + 50 mM NaCl.

Stability:

Although stable at room temperature for 3 weeks, lyophilized human TRAIL should be stored in a desiccated state below -18°C. Upon reconstitution human TRAIL should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by the ability to induce apoptotic cell death in TRAIL-sensitive U343MG cells and is typically 1-3 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

