

Recombinant Human TRAIL/APO 2 Ligand (rh TRAIL / CD253)

Synonyms: Tumor necrosis factor ligand superfamily member 10 (TNFSF10), TNF-related apoptosis-inducing ligand, Apo-2 ligand (APO2L)

Introduction: TRAIL is a ligand molecule which induces apoptosis. It is a type II transmembrane protein with homology to other members of the tumor necrosis factor family. In humans, the gene that encodes for TRAIL is located at chromosome 3q26. TRAIL binds to the death receptors, DR4 and DR5. The process of apoptosis is caspase-8-dependent. TRAIL preferentially induces apoptosis in transformed and tumor cells, but does not appear to kill normal cells although it is expressed at a significant level in most normal tissues.

Description: Recombinant human TRAIL produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 168 amino acids and having a total molecular mass of 19.6 kDa. rhTRAIL is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 µm filtered solution in 400 mM (NH₄)₂SO₄, 20 µM ZnSO₄, pH 7.5
The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh TRAIL in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized TRAIL although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TSLP 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.

Purity: Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence:

MRERGPQRVA AHITGTRGRS NTLSSPNSKN EKALGRKINS WESSRSGHSF LSNLHLRNGE LVIHEKGFYY
IYSQTYFRFQ EEIKENTKND KQMVQYIYKY TSYDPILLM KSARNSCWSK DAEYGLYSIY QGGIFELKEN
DRIFVSVTNE HLIDMDHEAS FFGAFLVG

Biological Activity: Determined by its ability to induce apoptosis of a human TRAIL sensitive cell line ED50 is 3 - 6 ng/ml.

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	10 µg	Cat.N°	11344913
<i>medium</i>	50 µg	Cat.N°	11344915
<i>large</i>	250 µg	Cat.N°	11344917

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