

## Overview

<b>Description</b>	<p><b>TNF-related apoptosis-inducing ligand (TRAIL)</b>, also known as Tumor Necrosis Factor Super-Family 10 (TNFSF10) or apoptosis 2 ligand (Apo2L), is a pleiotropic cytokine that belongs to the TNF superfamily. 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, and two decoy receptors DcR1 and DcR2. TRAIL binds to the death receptors which recruits the FAS-associated death domain and activates caspases 8 and 10 which 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, thereby increasing vascular remodeling and pulmonary arterial hypertension.</p> <p>Recombinant <b>Mouse TRAIL</b> produced in <i>E. coli</i> is a single, non-glycosylated polypeptide chain containing 174 amino acids. A fully biologically active molecule, rmTRAIL has a molecular mass of 20 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.</p>
<b>Accession No</b>	P50592
<b>Source</b>	<i>E. coli</i>
<b>Biological Activity</b>	ED <sub>50</sub> < 100 ng/mL, measured by the cell growth inhibitory assay using RPMI-8226 cells, corresponding to a specific activity of >1 × 10 <sup>4</sup> units/mg.
<b>Sequence</b>	<p>GRGGRPQKVA AHITGITRRS NSALIPISKD GKTGQKIES  WESSRKGHFS LNHVLFNRGE LVIEQEGLYY IYSQTYFRFQ  EAEDASKMVS KDKVTRKQLV QYIYKYTSYP DPVLMKSAR  NSCWSRDAEY GLYSIYQGGL FELKKNDRIE VSVTNEHLMD  LDQEASFFGA FLIN</p>

## Properties

<b>Measured Molecular Weight</b>	20 kDa, observed by reducing SDS-PAGE.
<b>Purity</b>	> 98% as analyzed by SDS-PAGE.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS.
<b>Reconstitution</b>	Reconstituted in sterile ddH <sub>2</sub> O or PBS at 100 µg/ml.
<b>Endotoxin Level</b>	< 0.2 EU/µg, determined by LAL method.
<b>Storage</b>	Lyophilized recombinant <b>Mouse TRAIL</b> remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse TRAIL should be stable up to 1 week at 4°C or up to 3 months at -20°C under sterile conditions. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.
<b>Note</b>	For research use only

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