

## Recombinant Mouse TNF-related apoptosis-inducing Ligand/TNFSF10 (Mouse TRAIL/TNFSF10)

### Product Information

Product Name	Cat#	Size
Recombinant Mouse TNF-related apoptosis-inducing Ligand/TNFSF10 (Mouse TRAIL/TNFSF10)	90622ES10	10 µg
	90622ES60	100 µg
	90622ES76	500 µg

### Product Description

TNF-related apoptosis-inducing ligand (TRAIL), also called apoptosis 2 ligand (Apo2L) for its similarity in sequence, structure, and function to Fas Ligand/Apo1L, is a 33-35 kDa type II transmembrane glycoprotein of the tumor necrosis factor superfamily, designated TNFSF10. Mouse TRAIL cDNA encodes a 17 amino acid (aa) N-terminal intracellular domain, a 20 aa transmembrane domain and a 253 aa extracellular domain. Like most TNF family members, TRAIL is bioactive as a homotrimer. Unlike other TNF family members, a zinc ion complexed by human Cys 230 (mouse Cys 240) of each of the three monomers is critical for structural stability. Either transmembrane or cysteine protease-released soluble sTRAIL induce apoptosis of many transformed cell lines, but rarely of normal cells. Accordingly, TRAIL is suggested to have a role in tumor surveillance. Mice with genetically disrupted TRAIL have defective thymocyte apoptosis, creating faulty negative selection and some increased susceptibility to induced autoimmune diseases. In humans, TRAIL controls apoptosis of erythrocyte precursors and sTRAIL is inversely correlated with hemoglobin. TRAIL transcripts are constitutively expressed in a variety of human (and presumably mouse) tissues and mononuclear cells.

### Product Properties

<b>Synonyms</b>	CD253; Protein TRAIL; TL2
<b>Accession</b>	P50592
<b>GeneID</b>	22035
<b>Source</b>	E.coli-derived Mouse TRAIL/TNFSF10, Pro118-Asn291.
<b>Molecular Weight</b>	Approximately 20.2 kDa.
<b>AA Sequence</b>	MPRGGRPQKV AAHITGITRR SNSALIPISK DGKTLGQKIE SWESSRKGHS FLNHVLFNRNG ELVIEQEGLY YIYSQTYFRF QEAEDASKMV SKDKVVRTKQL VQYIYKYTSY PDPIVLMKSA RNSCWSRDAE YGLYSIQGG LFELKKNDRIFVSVTNEHLM DLDQEASFFG AFLIN
<b>Tag</b>	None
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by a cytotoxicity assay using murine L929 cells is less than 0.5 ng/mL, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> IU/mg in the presence of actinomycin D. Fully biologically active when compared to standard.
<b>Endotoxin</b>	< 0.1 EU per 1µg of the protein by the LAL method.

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<b>Formulation</b>	Lyophilized from a 0.2 $\mu\text{m}$ filtered concentrated solution in PBS, pH 7.4, with 3 mM DTT. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
<b>Reconstitution</b>	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^{\circ}\text{C}$ . Further dilutions should be made in appropriate buffered solutions.

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### **Shipping and Storage**

The products are shipped with ice pack and can be stored at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$  for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

### **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!