



Product Datasheet

Product Name	TRAIL / APO2 Ligand Human Recombinant
Cata No	CB500345
Source	<i>Escherichia Coli.</i>
Synonyms	Tumor necrosis factor ligand superfamily member 10, TNF-related apoptosis-inducing ligand, Protein TRAIL, Apo-2 ligand, Apo-2L, CD253 antigen, TL2, APO2L, TNFSF10.

Description

TNF-related apoptosis-inducing ligand (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. This protein 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.

Soluble TNF-related apoptosis-inducing ligand Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 168 amino acids and having a molecular mass of 19.6 kDa.

The sTRAIL is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White Lyophilized (freeze-dried) powder.

Biological Activity

The activity is determined by the ability to induce

apoptotic cell death in TRAIL-sensitive U343MG cells, ED₅₀ for this effect is 1-3 ng/ml.

Purity

Greater than 97.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

Lyophilized from a concentrated solution (1mg/ml) contains 150mM NaCl, and 50mM sodium phosphate, pH 7.4.

Stability

Lyophilized APO 2 Ligand although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution 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.

Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Arg-Glu-Arg-Gly-Pro.