DATASHEET
Version 20181206

TRAIL/Apo2L, Human

Cat. No.: Z03124-50

Size: 50.0 ug

Synonyms: TNF-related apoptosis-inducing Ligand, TNFSF10, Apo2 Ligand, TL2

Description:

TRAIL/Apo2L, also known as Tumor Necrosis Factor Super-Family 10 (TNFSF10), is a pleiotropic cytokine thatbelongs to the TNF superfamily. The 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, two decoy receptors DcR1 and DcR2. TRAIL binds to the death receptors, recruits the FAS-associated death domain, activates caspases 8 and 10, and 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, resulting in increasing vascular remodeling and pulmonary arterial hypertension.
Recombinant human TRAIL/Apo2L (rhTRAIL) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 169 amino acids. A fully biologically active molecule, rhTRAIL has a molecular mass of 19.6 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MVRERGPQRV AAHITGTRGR SNTLSSPNSK NEKALGRKIN
00041 SWESSRSGHS FLSNLHLRNG ELVIHEKGFY YIYSQTYFRF
00081 QEEIKENTKN DKQMVQYIYK YTSYPDPILL MKSARNSCWS
00121 KDAEYGLYSI YQGGIFELKE NDRIFVSVTN EHLIDMDHEA
00161 SFFGAFLVG
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Source: *E. coli*

Species: Human

Biological Activity: ED_{50} < 40 ng/mL, measured by the cell growth inhibitory assay using RPMI-8226 cells, corresponding to a specific activity of > 2.5 × 10^4 units/mg.

Molecular Weight: 19.6 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH_2O or PBS at 100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human TRAIL/Apo2L (rhTRAIL) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhTRAIL remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.

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