

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant TRAIL/Apo2L, Human

Catalog Number: BK0176-50µg

Source: Escherichia coli.

Quantity: 50µg

Description:

TRAIL/Apo2L, also known as Tumor Necrosis Factor Super-Family 10 (TNFSF10), is a pleiotropic cytokine that belongs 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.

Molecular Weight:

19.6 kDa, observed by reducing SDS-PAGE.

Purity:

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

Biological Activity:

ED50 < 40 ng/mL, measured by the cell growth inhibitory assay using RPMI-8226 cells, corresponding to a specific activity of > 2.5 × 10⁴ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MVRERGPQRVA AHITGTRGRSNTLSSP-
NSKNEKALGRKINSWESSRSGHSFSLNLHLRN-
GELVIHEKGFYIYSQTYFRFQEEIKENTKND-
KQMVQYIYKYTSYPDPILLMKSARNSCWSKDAE
YGLYSIYQGGIFELKENDRIFVSVTNEHLID-
MDHEASFFGAFLVG

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant human TRAIL/Apo2L (rhTRAIL) remains stable up to 6 months at -80 °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.

Usage:

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