Recombinant human TRAIL/TNFSF10 protein

Catalog Number: ATGP3588

PRODUCT INFORMATION

Expression system
E.coli

Domain
114-281aa

UniProt No.
P50591

NCBI Accession No.
NP_003801

Alternative Names
Tumor necrosis factor ligand superfamily member 10, Apo-2 ligand, Apo-2L, TNF-related apoptosis-inducing ligand, Protein TRAIL, CD253, APO2L, TL2, TANCR

PRODUCT SPECIFICATION

Molecular Weight
19.6 kDa (169aa)

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 300mM NaCl, 0.1mM DTT, 10% glycerol

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Measured in a cytotoxicity assay using Jurkat human acute T cell leukemia cells. The ED50 range ≤4ng/ml.

Tag
Non-Tagged

Application
SDS-PAGE, Bioactivity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant human TRAIL/TNFSF10 protein

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Description

TNF-related apoptosis-inducing ligand (TRAIL) belongs to the tumor necrosis factor (TNF) cytokine family and induces rapid apoptosis in a wide variety of tumor cell lines upon binding to the death-signalling receptors on the cell membrane. TRAIL binds to one of four receptors that have been identified in humans, including TRAIL-R1/DR4, TRAIL-R2/KILLER/DR5, TRAIL-R3/DcR1/TRID, and TRAIL-R4/DcR2/TRUNDD. Both DR4 and DR5 are pro-apoptotic receptors, which contain a cytoplasmic death domain and mediate apoptosis on binding to TRAIL. By contrast, TRID and TRUNDD do not contain a cytoplasmic death domain and block the function of TRAIL by competing with DR4 and DR5 for binding of TRAIL. Recombinant human TRAIL was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

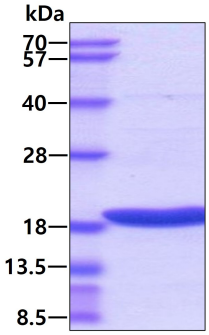
MVRERGPQRV AAHITGTRGR SNTLSSPNSK NEKALGRKIN SWESSRSGHS FLSNLHLRNG ELVIHEKGFY YIYSQTYFRF QEEIKENTKN DKQMVQYIYK YTSYPDPILL MKSARNSCWS KDAEYGLYSI YQGGIFELKE NDRIFVSVTN EHLIDMDHEA SFFGAFLVG

General References

Janssen EM., et al. (2005). Nature. 434(7029):88-93.
Deocaris CC., et al. (2007) Ann N Y Acad Sci. 1119:165-75

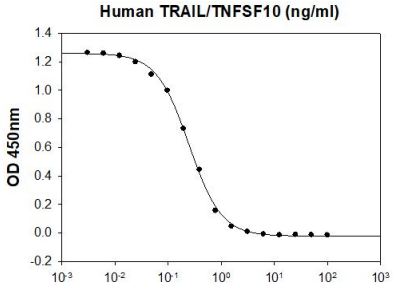
DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity



Human TRAIL/TNFSF10 stimulates cell cytotoxicity in the Jurkat human acute T cell leukemia cells. The ED50 range ≤4 ng/ml.