

TRAIL/TNFSF10 Protein, Mouse, Recombinant (aa 118-291, His)

General Information

Synonyms:	A330042I21Rik;tumor necrosis factor (ligand) superfamily, member 10;APO-2L;Trail;Ly81;AI448571;TL2
Protein Construction:	Pro118-Asn291
Species:	Mouse
Expression Host:	E. coli
Accession:	P50592
Molecular Weight:	22.2 kDa (Predicted and reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Supplied as sterile PBS, 25% glycerol, pH7.4.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein Background

Tumor necrosis factor ligand superfamily member 10 (TNFSF10), also known as TNF-related apoptosis-inducing ligand (TRAIL), Apo-2 ligand, and CD253, is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. TNFSF10 / Apo-2L / CD253 functions as a ligand that induces the process of cell death called apoptosis. TNFSF10 / TRAIL shows homology to other members of the tumor necrosis factor superfamily. As one member of the cluster of differentiation system, TNFSF10 / CD253 is commonly used as cell markers in Immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a

signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion TNFSF10 / Apo-2L / CD253 / TRAIL binds to several members of TNF receptor superfamily including TNFRSF10A / TRAILR1, TNFRSF10B / TRAILR2, TNFRSF10C / TRAILR3, TNFRSF10D / TRAILR4, and possibly also to TNFRSF11B/OPG. The activity of TNFSF10 / TRAIL may be modulated by binding to the decoy receptors TNFRSF10C / TRAILR3, TNFRSF10D/TRAILR4, and TNFRSF11B/OPG that cannot induce apoptosis. The binding of this protein to its receptors has been shown to trigger the activation of MAPK8 / JNK, caspase 8, and caspase 3. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. Cancer Immunotherapy Immune Checkpoint Immunotherapy Targeted Therapy

Reference

Song C, et al. (2005) TRAIL (CD253), a new member of the TNF superfamily. *J Biol Regul Homeost Agents*. 19(1-2): 73-7.

Kuribayashi K, et al. (2008) TNFSF10 (TRAIL), a p53 target gene that mediates p53-dependent cell death. *Cancer Biol Ther*. 7(12): 2034-8.

Wiley SR, et al. (1995) Identification and characterization of a new member of the TNF family that induces apoptosis. *Immunity*. 3(6): 673-82.

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