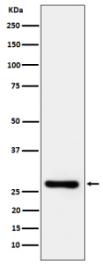
TRAIL R3 Antibody / DcR1 [clone 31T28] (FY12974)

Catalog No.	Formulation	Size
FY12974	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31T28
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	O14798
Applications	Western Blot : 1:500-1:2000 Immunocytochemistry/Immunofluorescence : 1:50-1:200
Limitations	This TRAIL R3 antibody is available for research use only.



Western blot analysis of TRAIL R3 expression in human Jurkat cell lysate using TRAIL R3 antibody. Predicted molecular weight ~27 kDa.

Description

TRAIL R3 antibody detects Decoy receptor 1, encoded by the TNFRSF10C gene. This protein is also referred to as TRAIL receptor 3 and DcR1, and it belongs to the tumor necrosis factor receptor superfamily. Unlike signaling TRAIL

receptors, DcR1 lacks a functional cytoplasmic death domain and therefore does not induce apoptosis. Instead, it acts as a decoy receptor by binding TRAIL (tumor necrosis factor related apoptosis inducing ligand) and preventing it from activating apoptotic pathways through receptors such as TRAIL R1 and TRAIL R2. TRAIL R3 antibody provides a tool for researchers to investigate how apoptosis is regulated in normal tissues and tumors.

Decoy receptor 1 is expressed in many normal tissues, particularly in the gastrointestinal tract, lungs, and liver, where it may help protect against inappropriate TRAIL mediated apoptosis. Studies using TRAIL R3 antibody have shown that its presence prevents excessive cell death, preserving tissue integrity under inflammatory conditions. In immune regulation, DcR1 may act as a safeguard, balancing the cytotoxic effects of TRAIL expressing immune cells with the need to maintain healthy tissue survival.

In cancer biology, expression of Decoy receptor 1 has been reported in multiple tumor types. By competing for TRAIL binding, DcR1 enables malignant cells to resist TRAIL induced apoptosis, thereby promoting survival. Research with TRAIL R3 antibody has demonstrated that tumors expressing high levels of DcR1 show decreased sensitivity to TRAIL based therapies. This has made TNFRSF10C a focus of interest in understanding resistance mechanisms to immunotherapy and targeted apoptosis inducing drugs.

TRAIL R3 antibody is useful in western blotting, immunohistochemistry, and flow cytometry. Western blotting confirms expression in cell lines and tissues, while immunohistochemistry demonstrates distribution across normal and cancerous tissues. Flow cytometry with TRAIL R3 antibody allows analysis of surface expression on live cells, aiding in functional studies of TRAIL signaling. These applications provide insights into how DcR1 balances death receptor signaling in health and disease.

By providing validated TRAIL R3 antibody reagents, NSJ Bioreagents supports research into apoptosis, immune regulation, and cancer therapy resistance. Detecting Decoy receptor 1 enables researchers to explore mechanisms of cell survival, tumor evasion, and therapeutic response.

Application Notes

Optimal dilution of the TRAIL R3 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human DcR1 / CD263 was used as the immunogen for the TRAIL R3 antibody.

Storage

Store the TRAIL R3 antibody at -20oC.