

TNFRSF10D Antibody / Tumor necrosis factor receptor superfamily member 10D (FY12336)

Catalog No.	Formulation	Size
FY12336	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9UBN6
Applications	Western Blot : 0.25-0.5ug/ml Immunohistochemistry : 2-5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This TNFRSF10D antibody is available for research use only.

Description

The TNFRSF10D antibody targets tumor necrosis factor receptor superfamily member 10D, also known as decoy receptor 2 or TRAIL receptor 4. TNFRSF10D is a type I transmembrane receptor that belongs to the broader TNF receptor superfamily, which mediates responses to cytokines such as TNF and related ligands. Unlike other death receptors in the TRAIL receptor family, TNFRSF10D lacks a functional cytoplasmic death domain. This structural difference prevents the receptor from transmitting apoptotic signals upon TRAIL binding, effectively classifying TNFRSF10D as a decoy receptor. By competing for TRAIL without inducing apoptosis, TNFRSF10D serves as a protective modulator, regulating the balance between cell death and survival in tissues exposed to TRAIL signaling.

TNFRSF10D is encoded by the TNFRSF10D gene on chromosome 8p21 and is expressed in a wide range of tissues, including immune system cells, epithelial tissues, and endothelial cells. Its ability to act as a natural antagonist to apoptosis induction has made it a focus of cancer research. In tumors, TNFRSF10D expression may influence sensitivity to TRAIL-based therapies by preventing cell death, thereby contributing to resistance. The TNFRSF10D antibody provides a means to examine receptor expression across tumor models and to assess its regulatory role in survival

pathways. Beyond oncology, the receptor may also play roles in immune homeostasis and tissue protection under stress conditions.

The TNFRSF10D antibody can be applied to a variety of experimental platforms. Western blotting provides insights into receptor expression and post-translational modifications. Immunohistochemistry enables the detection of TNFRSF10D across different tissue sections, offering information about its spatial distribution. Flow cytometry can quantify receptor levels on the surface of immune cell subsets, clarifying its function in regulating TRAIL-mediated apoptosis. These experimental approaches make the TNFRSF10D antibody a versatile research tool for investigating receptor biology.

Interest in TRAIL receptor biology continues to expand as researchers explore therapeutic strategies to induce apoptosis in cancer cells. Since TNFRSF10D counteracts the apoptotic effect of TRAIL, it has been proposed as a therapeutic target for sensitizing resistant cells. The availability of the TNFRSF10D antibody through NSJ Bioreagents enables researchers to measure receptor expression and test hypotheses about its functional contribution to tumor progression, immune regulation, and resistance to cell death. By investigating expression profiles and signaling interactions, scientists can build a clearer picture of TNFRSF10D's role in human health and disease.

Application Notes

Optimal dilution of the TNFRSF10D antibody should be determined by the researcher.

Immunogen

E.coli-derived human DCR2/TNFRSF10D recombinant protein (Position: T173-A379) was used as the immunogen for the TNFRSF10D antibody.

Storage

After reconstitution, the TNFRSF10D antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.