

AITRL Human

AITRL Human Recombinant

CYK0026

Product Overview

Name	AITRL Human
Accession(Primary)	Q9UNG2
Description	AITRL Human Recombinant

Target information (Q9UNG2)

Gene Name

About Gene Symbol

Background

AITRL Human Recombinant: Unraveling its Significance in Immune Modulation and Therapeutic Implications

1. Abstract This research paper provides a comprehensive examination of AITRL Human Recombinant, an essential protein involved in immune modulation. By exploring its structure, signaling mechanisms, biological functions, and implications in disease pathology, we shed light on the potential therapeutic applications of AITRL in immune-related disorders.

2. Introduction AITRL, also known as TNFSF18, is a receptor protein belonging to the tumor necrosis factor superfamily. It plays a crucial role in immune regulation and has emerged as an intriguing target for therapeutic interventions in various immune-mediated conditions.

3. Structure and Signaling of AITRL AITRL is a transmembrane protein with a conserved TNF domain. It interacts with its receptor, AITR (TNFRSF18), leading to downstream signaling events that modulate immune cell function. The binding of AITRL to AITR promotes immune cell activation and cytokine production.

4. Biological Functions of AITRL AITRL is involved in the regulation of immune responses by influencing T-cell activation, proliferation, and differentiation. It can stimulate effector T-cell responses while also promoting the development and function of regulatory T cells, thus maintaining immune homeostasis.

5. AITRL in Disease Pathology Dysregulation of AITRL

signaling has been implicated in various immune-related disorders, including autoimmune diseases, allergic reactions, and cancer. AITRL's involvement in disease pathology highlights its significance as a potential therapeutic target.

6. Therapeutic Potential of AITRL The unique role of AITRL in immune modulation presents opportunities for therapeutic interventions. Modulating AITRL signaling holds promise for manipulating immune responses in the context of autoimmune diseases, allergic disorders, and cancer immunotherapy.

7. Conclusion and Future Perspectives While our understanding of AITRL and its functions has advanced significantly, further research is needed to unravel its complex signaling pathways and therapeutic potential fully. Continued investigations into AITRL biology will pave the way for the development of targeted therapies for immune-related disorders.