

AIF1 Human

Allograft Inflammatory Factor 1 Human Recombinant

CYK0022

Product Overview

Name	AIF1 Human
Accession(Primary)	P55008
Description	Allograft Inflammatory Factor 1 Human Recombinant

Target information (P55008)

Gene Name

About Gene Symbol

Background

Allograft Inflammatory Factor 1 Human Recombinant: Uncovering its Role in Immune Responses and Therapeutic Prospects

- Abstract** This paper explores the Allograft Inflammatory Factor 1 Human Recombinant (AIF-1), a cytoplasmic, IFN-gamma-inducible calcium-binding protein involved in inflammation and immunity. We review the structure, biological roles, and involvement of AIF-1 in disease pathology. The therapeutic potential of AIF-1 in immune-related disorders is also explored.
- Introduction** AIF-1, also known as IBA1, plays an important role in immune responses. It is associated with various immune cells, particularly macrophages, and has been implicated in numerous inflammatory and immune-related diseases. Understanding the function of AIF-1 could aid the development of novel therapeutic strategies.
- Structure and Signaling of AIF-1** AIF-1 is a small 17 kDa protein with an EF-hand calcium-binding motif. Although the precise mechanism by which AIF-1 exerts its functions is not entirely clear, it is known to regulate the activation, migration, and proliferation of macrophages, key cells involved in immune responses.
- Biological Functions of AIF-1** AIF-1 has been shown to play key roles in macrophage activation and function, which are central to inflammation and

immunity. It is also implicated in cell survival, proliferation, and differentiation. 5. AIF-1 in Disease Pathology AIF-1 has been associated with a range of inflammatory and immune-related diseases, including rheumatoid arthritis, atherosclerosis, and multiple sclerosis. It is also implicated in several cancers, further underscoring its broad physiological and pathological relevance. 6. Therapeutic Potential of AIF-1 Given its pivotal role in immune responses, AIF-1 presents an intriguing target for therapeutic interventions in immune-related diseases. Modulating the activity of AIF-1 could potentially alleviate pathological inflammation and autoimmunity. 7. Conclusion and Future Perspectives Our knowledge of AIF-1 and its functions has significantly improved in recent years, but much remains to be discovered. Further research into AIF-1's exact molecular mechanisms and roles in disease will undoubtedly contribute to the development of novel therapeutic strategies.