9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

AREG Human

Amphiregulin Human Recombinant
GRF0013

Product Overview

Name	AREG Human
Description	
Amphiregulin Human Recombinant	
Accession (Primary)	P15514
Immunogen	
Anti-human ARF1 mAb, is derived from hybridization of mouse FO myeloma cells with spleen cells from BALB/c mice immunized with recombinant human ARF1 amino acids 1-181 purified from E. coli.	
Synonyms	
ARF-1, ADP-ribosylation factor 1, ARF1.	
Introduction	
ARF1 is a small guanine nucleotide-binding protein that increases the enzymatic activities of cholera toxin. ARF1 is necessary and ubiquitous in eukaryotes. ARF1 takes part in vesicular transport and functioning via phospholipase D activation. ARF1 is involved in membrane traffic and organelle integrity which are closely tied to their reversible association with membranes and distinct interactions with membrane phospholipids.	
Formulation	
1mg/ml containing PBS, pH-7.4, & 0.1% Sodium Azide.	
Applications	
ARF1 antibody has been tested by ELISA, Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended dilution range for Western blot analysis is 1:1,000.	
Type	
Mouse Anti Human Monoclonal.	
Clone	
P1B3AT.	
Ig Subclass	
Mouse IgG1 heavy chain and k light chain.	
Storage Procedures	
For periods up to 1 month store at 4°C, for longer periods of time, store at -20°C. Prevent freeze thaw cycles.	

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Stability / Shelf Life

12 months at -20°C. 1 month at 4°C.

Precautions

AREG Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P15514)

Background

Amphiregulin Human Recombinant: Exploring its Role in Cancer Biology and Therapeutic Applications Abstract: Amphiregulin, a member of the epidermal growth factor (EGF) family, has gained significant attention in cancer research. This research paper provides an overview of Amphiregulin human recombinant, highlighting its molecular characteristics, signaling pathways, and therapeutic potential. Understanding the multifaceted role of Amphiregulin opens avenues for targeted cancer therapies. This article provides a concise analysis of Amphiregulin, emphasizing its impact on cancer biology and its therapeutic applications. Introduction: Cancer continues to be a significant health challenge worldwide, necessitating novel therapeutic approaches. Amphiregulin, an EGF family member, has emerged as a promising target in cancer research. This paper provides an overview of Amphiregulin, shedding light on its structure, function, and therapeutic potential. Amphiregulin Signaling and Mechanisms: Amphiregulin exerts its effects through the binding and activation of the EGF receptor (EGFR). Upon activation, a cascade of intracellular signaling pathways is triggered, including the MAPK and PI3K/AKT pathways. These pathways regulate critical cellular processes such as cell proliferation, survival, migration, and angiogenesis. Amphiregulin in Cancer Biology: Amphiregulin has been implicated in various aspects of cancer biology, including tumor growth, metastasis, and resistance to therapy. Its overexpression is observed in several cancer types, and its role in promoting tumor growth and metastasis has been demonstrated in preclinical studies. Targeting Amphiregulin signaling shows promise in inhibiting cancer progression and overcoming therapy resistance. Therapeutic Potential of Amphiregulin Human Recombinant: Amphiregulin human recombinant holds significant therapeutic potential in cancer treatment. Strategies aimed at blocking Amphiregulin-EGFR interactions or inhibiting downstream signaling pathways are being explored as potential therapeutic interventions. Additionally, Amphiregulin could serve as a predictive biomarker to identify patients who are more likely to respond to targeted therapies. Challenges and Future Directions: While the therapeutic targeting of Amphiregulin shows promise, several challenges need to be addressed. Further research is required to fully understand the complex interplay between Amphiregulin and other molecular pathways in cancer biology. Additionally, the development of specific and potent inhibitors and the identification of patient selection criteria are

important considerations for successful clinical translation. Conclusion: Amphiregulin human recombinant represents a promising avenue for targeted cancer therapy. Understanding the molecular mechanisms and functional implications of Amphiregulin in cancer biology offers new opportunities for developing innovative treatments. Continued research in this field has the potential to improve patient outcomes and contribute to the advancement of personalized medicine.