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

ANGPTL4 Human

Angiopoietin-like Protein 4 Human Recombinant
CYK0036

Product Overview

Name	ANGPTL4 Human
Description	
Angiopoietin-like Protein 4 Human Recombinant	
Accession (Primary)	Q9BY76
Synonyms	
ANGPTL4, NL2, ARP4, FIAF, PGAR, HFARP, pp1158, ANGPTL2, Fasting- Induced Adipose Factor, Hepatic Fibrinogen/Angiopoietin-Related Protein, PPARG Angiopoietin-Related Protein.	
Introduction	
FIAF (fasting-induced adipose factor) a.k.a ANGPTL4 or PGAR or HFARP is an adipocytokine up-regulated by fasting, by peroxisome proliferator-activated receptor agonists, and by hypoxia. ANGPTL4 is found in human and mouse blood plasma both as a native protein and in a truncated form. In human white adipose tissue and SGBS adipocytes, only the native form of ANGPTL4 could be detected, whereas in mice the differentiation of mouse 3T3-L1 adipocytes is associated with the production of truncated ANGPTL4. However, the truncated ANGPTL4 is produced by human liver. In human blood plasma FIAF is mainly presented in a truncated form (FIAF-S2), whose levels treatment increases (as shown by experimental data). There is an inter individual variation in ANGPTL4 levels of both the truncated and the native form, however those levels were not influenced by prolonged semistarvation and are not associated with body mass index.	
Source	
Escherichia Coli.	
Physical Appearance	
Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Filtered and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer pH-4.	
Stability	
Store lyophilized Angiopoietin-like Protein 4 Human recombinant at -20°C. Aliquot the ANGPTL4 after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted ANGPTL4 can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.	
Purity	

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Greater than 95% as determined by SDS-PAGE.

Amino acid sequence

MRGSHHHHHH GMASHM GPVQ SKSPRFASWD EMNVLAHGLL QLGQGLREHA ERTRSQLSAL ERRLSACGSA CQGTEGSTDL PLAPESRVDP EVLHSLQTQL KAQNSRIQQL FHKVAQQQRH LEKQHLRIQH LQSQFGLLDH KHLDHEVAKP ARRKRLPEMA QPVDPAHNVS RLHRLPRDCQ ELFQVGERQS GLFEIQPQGS PPFLVNCKMT SDGGWTVIQR.

Solubility

Add 0.1M Acetate buffer pH4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of this antigen is limited.

Background

Angiopoietin-like Protein 4 Human Recombinant: A Promising Therapeutic Approach for Metabolic Disorders Abstract: Angiopoietin-like protein 4 (ANGPTL4) is a multifunctional protein involved in the regulation of lipid metabolism and energy homeostasis. It has emerged as a potential therapeutic target for metabolic disorders, including obesity, dyslipidemia, and insulin resistance. The availability of human recombinant ANGPTL4 protein has provided researchers with a valuable tool to investigate its biological functions and explore its therapeutic potential. This concise review provides an overview of the role of ANGPTL4 in metabolic regulation and discusses the potential of ANGPTL4 human recombinant protein as a therapeutic intervention. Introduction: Metabolic disorders are a global health challenge with significant implications for cardiovascular health. ANGPTL4, a member of the angiopoietin-like protein family, has gained attention for its role in lipid metabolism and energy balance. ANGPTL4 influences the uptake, storage, and utilization of lipids, as well as glucose metabolism, making it an attractive target for therapeutic interventions. Mechanisms of ANGPTL4 Action: ANGPTL4 exerts its effects through multiple mechanisms. It inhibits lipoprotein lipase (LPL) activity, reducing the hydrolysis of triglycerides and leading to elevated plasma triglyceride levels. ANGPTL4 also promotes adipose tissue lipolysis, facilitating the release of fatty acids for energy utilization. Moreover, ANGPTL4 affects glucose metabolism by modulating insulin signaling and glucose uptake in various tissues. Role of ANGPTL4 in Metabolic Regulation: ANGPTL4 plays a critical role in lipid and glucose metabolism. It regulates plasma lipid levels by modulating LPL activity and lipid uptake in adipose tissue and skeletal muscle. ANGPTL4 also influences energy homeostasis by promoting lipid mobilization from adipocytes and regulating fatty acid oxidation. Additionally, ANGPTL4 impacts glucose metabolism by modulating insulin sensitivity and glucose uptake in skeletal muscle and adipose tissue. Therapeutic Potential of ANGPTL4 Human Recombinant Protein: The availability of ANGPTL4 human recombinant protein opens new avenues for therapeutic interventions targeting metabolic disorders. Administration of ANGPTL4 recombinant protein or modulation of ANGPTL4 activity offers potential strategies to improve lipid profiles, reduce adiposity, and enhance insulin sensitivity. Preclinical studies have shown promising results, demonstrating the potential of ANGPTL4 as a therapeutic target for metabolic disorders. Conclusion: ANGPTL4 represents a promising target for therapeutic interventions in metabolic disorders. Its involvement in the regulation of lipid and glucose metabolism makes it an attractive candidate for the development of

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novel treatment approaches. The availability of ANGPTL4 human recombinant protein enables further exploration of its therapeutic potential and may contribute to the development of effective interventions for metabolic disorders.

Precautions

ANGPTL4 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q9BY76)

Background

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Conclusion: ANGPTL4 represents a promising target for therapeutic interventions in metabolic disorders. Its involvement in the regulation of lipid and glucose metabolism makes it an attractive candidate for the development of novel treatment approaches. The availability of ANGPTL4 human recombinant protein enables further exploration of its therapeutic potential and may contribute to the development of effective interventions for metabolic disorders.