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

Desmin Chicken

Desmin Chicken Gizzard
NTP0021

Product Overview

Name	Desmin Chicken

Description

Desmin Chicken Gizzard

Synonyms

Desmin, DES, CSM1, CSM2, CMD1I, FLJ12025, FLJ39719, FLJ41013, FLJ41793.

Source

Chicken gizzard.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Desmin was lyophilized from a 1mg/ml solution containing 10 mM sodium phosphate buffer pH 7.5, 6M urea, 1mM EDTA, 2mM DTT and 10mM methylammonium chloride.

Stability

Store the lyophilized Desmin between 2-8°C, do not freeze. Upon reconstitution Desmin should be stored at -20°C. Please prevent freeze-thaw cycles .

Purity

Greater than 98.0% as determined by SDS-PAGE.

Solubility

It is recommended to reconstitute the lyophilized Desmin in sterile 18MΩ-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Background

Desmin, an intermediate filament protein, plays a fundamental role in maintaining the structural integrity and function of muscle cells. While extensive research has been conducted on desmin in mammals, the study of desmin in chickens is an emerging area with considerable potential for advancing our understanding of muscle biology. Chickens are valuable model organisms for studying muscle development, growth, and regeneration due to their relatively simple muscular system and economic significance in poultry production. This research aims to provide a comprehensive exploration of desmin in chickens, shedding light on its functions and implications for muscle structure and function. The primary objective of this research is to elucidate the role of desmin in chicken muscle structure and development.

In vitro and in vivo experiments, utilizing chicken cell cultures and embryonic models, will be conducted to investigate how desmin contributes to the organization of muscle fibers, sarcomere assembly, and myofibrillogenesis. Understanding these mechanisms is fundamental for deciphering the complexities of muscle development in chickens. The second objective is to assess the clinical and economic relevance of desmin in poultry production. Studies involving broiler chickens will be conducted to evaluate the impact of desmin mutations or variations on muscle growth, meat quality, and disease susceptibility. These investigations may provide valuable insights into potential strategies for enhancing poultry production efficiency and meat quality. The third objective is to explore the potential applications of desmin in biotechnology and tissue engineering. Research will investigate the use of desmin-expressing chicken cells as models for studying muscle-related diseases and for developing tissue engineering approaches for muscle repair and regeneration. By delving into the functions and roles of desmin in chickens, this research aims to expand our knowledge of muscle biology, its implications for poultry production, and its potential applications in biotechnology and regenerative medicine.

Precautions

Desmin Chicken is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Desmin, an intermediate filament protein, plays a fundamental role in maintaining the structural integrity and function of muscle cells. While extensive research has been conducted on desmin in mammals, the study of desmin in chickens is an emerging area with considerable potential for advancing our understanding of muscle biology. Chickens are valuable model organisms for studying muscle development, growth, and regeneration due to their relatively simple muscular system and economic significance in poultry production. This research aims to provide a comprehensive exploration of desmin in chickens, shedding light on its functions and implications for muscle structure and function. The primary objective of this research is to elucidate the role of desmin in chicken muscle structure and development. In vitro and in vivo experiments, utilizing chicken cell cultures and embryonic models, will be conducted to investigate how desmin contributes to the organization of muscle fibers, sarcomere assembly, and myofibrillogenesis. Understanding these mechanisms is fundamental for deciphering the complexities of muscle development in chickens. The second objective is to assess the clinical and economic relevance of desmin in poultry production. Studies involving broiler chickens will be conducted to evaluate the impact of desmin mutations or variations on muscle growth, meat quality, and disease susceptibility. These investigations may provide valuable insights into potential strategies for enhancing poultry production efficiency and meat quality. The third objective is to explore the potential applications of desmin in biotechnology and tissue engineering. Research will investigate the use of desmin-expressing chicken cells as models for studying muscle-related diseases and for developing tissue engineering approaches for muscle repair

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