

Artemin Human

Artemin Human Recombinant
NTR0001

Product Overview

Name Artemin Human

Description

Artemin Human Recombinant

Accession (Primary) [O95441](#)

Synonyms

Arsenite methyltransferase, Methylarsonite methyltransferase, S-adenosyl-L-methionine:arsenic(III) methyltransferase, AS3MT, CYT19, RP11-753C18.6.

Introduction

Arsenic Methyltransferase (AS3MT) catalyzes the transfer of a methyl group from S-adenosyl-L-methionine (AdoMet) to trivalent arsenical and may have a role in arsenic metabolism. AS3MT methylates arsenite to produce methylarsonate, $\text{Me-AsO}_3\text{H}_2$, which is reduced by methylarsonate reductase to methylarsonite, Me-As(OH)_2 . Methylarsonite which is also a substrate, is transformed into the much less toxic complex dimethylarsinate (cacodylate), $\text{Me}_2\text{As(O)-OH}$.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered colorless solution.

Formulation

AS3MT protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 10% glycerol and 0.15M NaCl.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MGS MAALRD AEIQKDVQTY YGQVLKRSAD LQTNGCVTTA RPVPKHIREA
LQNVHEEVAL RYYGCGLVIP EHLENCWILD LGSGSGRDCY VLSQLVGEKG HVTGIDMTKG QVEVAEKYLD
YHMEKYGFQA SNVTFIHGYI EKLGEAGIKN ESHDIVVSN VINLVPDKQQ VLQEAYRVLK HGGELYFSDV

YTSLELPEEI RTHKVLWGEC LGGALYWKEK AVLAQKIGFC PPRLVTANLI TIQNKELERV IGDCRFVSAT
FRLFKHSKTG PTKRCQVIYN GGITGHEKEL MFDANFTFKE GEIVEVDEET AAILKNSRFA QDFLIRPIGE
KLPTSGGCSA LELKDIITDP FKLAEEESDSM KSRCVPDAAG GCCGTTKKSC.

Precautions

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

Target Information: ([O95441](#))

Background

Artemin Human Recombinant: Unraveling its Role in Neurobiology and Therapeutic Applications Abstract: Artemin, a member of the glial cell line-derived neurotrophic factor (GDNF) family, holds significant potential in neurobiology and therapeutic interventions. This research paper provides an overview of Artemin human recombinant, elucidating its molecular characteristics, signaling pathways, and therapeutic implications in neurological disorders. Understanding the multifaceted role of Artemin offers new avenues for targeted therapies. This article offers a concise analysis of Artemin, highlighting its impact on neurobiology and its therapeutic applications. **Introduction:** Neurological disorders represent a major challenge in healthcare, necessitating innovative therapeutic strategies. Artemin, a member of the GDNF family, has emerged as a promising molecule in neurobiology. This paper provides an overview of Artemin, shedding light on its structure, function, and therapeutic potential. **Artemin Signaling and Mechanisms:** Artemin binds to its receptor, Ret tyrosine kinase, and activates downstream signaling pathways, including the PI3K/AKT and MAPK pathways. These signaling cascades play crucial roles in neuronal survival, growth, and differentiation, highlighting the significance of Artemin in neurodevelopment and neuroprotection. **Artemin in Neurological Disorders:** Artemin has been implicated in various neurological disorders, including peripheral neuropathies and neurodegenerative diseases. Its neuroprotective properties and ability to enhance neuronal survival and regeneration make it a promising target for therapeutic interventions. Furthermore, Artemin may play a role in pain modulation and sensory neuron function. **Therapeutic Potential of Artemin Human Recombinant:** Artemin human recombinant offers promising prospects in the field of neurotherapeutics. Strategies aimed at modulating Artemin signaling or delivering exogenous Artemin hold potential for promoting neuronal survival, regeneration, and functional recovery. Artemin-based therapies could be developed for a range of neurological disorders, including peripheral neuropathies, Parkinson's disease, and spinal cord injuries. **Challenges and Future Directions:** While the therapeutic targeting of Artemin shows promise, several challenges lie ahead. Further research is needed to understand the precise mechanisms underlying Artemin's effects and its interactions with other signaling pathways. Additionally, the development of effective

delivery methods and the identification of patient subgroups that may benefit from Artemin-based therapies are important considerations for clinical translation. Conclusion: Artemin human recombinant represents a promising avenue for therapeutic interventions in neurological disorders. Understanding the molecular mechanisms and functional implications of Artemin in neurobiology offers new opportunities for developing innovative treatments. Continued research in this field has the potential to improve the lives of individuals affected by neurological conditions and advance the field of neurotherapeutics.