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EBV EBNA1

Epstein-Barr Virus (HHV-4) EBNA1 Recombinant
VAG0144

Product Overview

Name	EBV EBNA1

Description

Epstein-Barr Virus (HHV-4) EBNA1 Recombinant

Synonyms

Epstein-Barr virus nuclear antigen 1, BKRF1, EBNA1.

Source

Escherichia Coli.

Physical Appearance

Filtered White lyophilized (freeze-dried) powder.

Formulation

The filtered (0.4 µm) concentrated protein solution was lyophilized with PBS, PH 7.4.

Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time.

Purity

Greater than 95% as determined by SDS-PAGE.

Amino acid sequence

MKHHHHHHPV GEADYFEYHQ EGGPDGEPDV PPGAIEQGPA DDPGEGPSTG PRGQGDGGRR KKGGWFGKHR GQGGSNPKFE NIAEGLRALL ARSHVERTTD EGTWVAGVFV YGGSKTSLYN LRRGTALAIP QCRLTPLSRL PFGMAPGPGP QPGPLRESIV CYFMVFLQTH IFAEVLKDAI KDLVMTKPAP TCNIRVTVCS FDDGVDLPPW FPPMVEGAAA EGDDGDDGDE GGDGDEGEEG QE.

Solubility

It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely.

Background

Epstein-Barr Virus (EBV) is a ubiquitous human herpesvirus that infects the majority of the global population. Among its numerous viral proteins, Epstein-Barr Nuclear Antigen 1 (EBNA1) plays a pivotal role in the virus's life cycle and pathogenicity. EBNA1 is indispensable for the maintenance and replication of the viral episome within host cells

and is a key player in the oncogenic transformation of infected cells. This research endeavors to provide a comprehensive exploration of EBV EBNA1, shedding light on its multifaceted functions and potential applications in understanding EBV-related diseases and therapeutic strategies. The primary objective of this research is to elucidate the diverse roles of EBNA1 in EBV infection and persistence. In vitro and in vivo experiments utilizing cell culture systems and animal models will be conducted to investigate how EBNA1 interacts with host cellular factors, regulates viral gene expression, and contributes to viral latency. Understanding these mechanisms is crucial for deciphering the complexities of EBV pathogenesis. The second objective is to assess the clinical relevance of EBNA1 in EBV-associated diseases, particularly in the context of EBV-associated cancers such as nasopharyngeal carcinoma and Burkitt's lymphoma. Clinical studies involving patient samples and preclinical models will be employed to evaluate the potential diagnostic and therapeutic applications of EBNA1 as a biomarker or target in EBV-related malignancies. The third objective is to explore the therapeutic implications of targeting EBNA1 in EBV-associated diseases. Research will investigate the development of novel antiviral agents or immunotherapies that specifically target EBNA1-mediated processes, such as viral episome maintenance and immune evasion. Harnessing the potential of EBNA1 as a therapeutic target may lead to innovative approaches in the management of EBV-related diseases. By delving into the multifunctional roles of EBV EBNA1, this research aims to expand our understanding of its significance in EBV pathogenesis and its potential applications in diagnostics and therapeutics. The findings may contribute to the development of novel strategies for the prevention, treatment, and control of EBV-associated diseases.

Precautions

EBV EBNA1 is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Epstein-Barr Virus (EBV) is a ubiquitous human herpesvirus that infects the majority of the global population. Among its numerous viral proteins, Epstein-Barr Nuclear Antigen 1 (EBNA1) plays a pivotal role in the virus's life cycle and pathogenicity. EBNA1 is indispensable for the maintenance and replication of the viral episome within host cells and is a key player in the oncogenic transformation of infected cells. This research endeavors to provide a comprehensive exploration of EBV EBNA1, shedding light on its multifaceted functions and potential applications in understanding EBV-related diseases and therapeutic strategies. The primary objective of this research is to elucidate the diverse roles of EBNA1 in EBV infection and persistence. In vitro and in vivo experiments utilizing cell culture systems and animal models will be conducted to investigate how EBNA1 interacts with host cellular factors, regulates viral gene expression, and contributes to viral latency. Understanding these mechanisms is crucial for deciphering the complexities of EBV pathogenesis. The second objective is to assess the clinical relevance of EBNA1 in EBV-associated diseases, particularly in the context of EBV-associated cancers such as nasopharyngeal carcinoma and

Burkitt's lymphoma. Clinical studies involving patient samples and preclinical models will be employed to evaluate the potential diagnostic and therapeutic applications of EBNA1 as a biomarker or target in EBV-related malignancies. The third objective is to explore the therapeutic implications of targeting EBNA1 in EBV-associated diseases. Research will investigate the development of novel antiviral agents or immunotherapies that specifically target EBNA1-mediated processes, such as viral episome maintenance and immune evasion. Harnessing the potential of EBNA1 as a therapeutic target may lead to innovative approaches in the management of EBV-related diseases. By delving into the multifunctional roles of EBV EBNA1, this research aims to expand our understanding of its significance in EBV pathogenesis and its potential applications in diagnostics and therapeutics. The findings may contribute to the development of novel strategies for the prevention, treatment, and control of EBV-associated diseases.